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ABSTRACT

This longitudinal study examined quality indicators in child care centers in three California communities in 1994, 1996, and 2000. Data were collected by means of interviews with teachers and directors and from classroom observations. Data collection in 1994 and 1996 focused on centers seeking NAEYC accreditation; the 2000 sample of 75 centers included many accredited or highly rated centers. Among the major findings are the following: (1) the teaching staff was alarmingly unstable, with the yearly turnover and centers' inability to replace staff contributing to instability; (2) compensation of teaching staff has not kept pace with the cost of living; (3) high turnover negatively affected teachers' ability to do their jobs, with the majority recommending improved wages as essential to stemming turnover; (4) director turnover was exceedingly high and contributed to staff instability; (5) new teaching staff were significantly less well educated than those they replaced, although there were no differences in professional backgrounds between former or new directors; (6) centers paying higher wages were better able to retain qualified teachers and directors; (7) the presence of a greater proportion of highly-trained teaching staff in 2000 was the strongest predictor of whether a center could sustain quality improvement over time, with wages also a significant predictor; and (8) NAEYC-accredited programs demonstrated higher overall quality than non-NAEYC programs but experienced similar levels of teaching and administrative staff turnover. (Two appendices describe the 1994-1996 study and list the data tables and figures in the report. Contains 65 references.) (KB)

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THEN & NOW

CHANGES IN CHILD CARE STAFFING, 1994-2000

Technical Report

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PRINCIPAL INVESTIGATORS:

Marcy Whitebook Laura Sakai Emily Gerber Carollee Howes

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The Center for the Child Care Workforce (CCW), founded in 1977, is a nonprofit resource, education and advocacy organization committed to improving child care quality by upgrading the compensation, working conditions and training of child care teachers and family child care providers. The Center for the Child Care Workforce advocates for fair and decent employment for caregivers; affordable, quality care for families; and a greater investment of public funds into our nation's child care system. CCW's goal is to create a unified and powerful voice for the child care workforce. CCW coordinates the *Worthy Wage Network*, a broad-based mobilization of teachers, providers, directors, parents, and allies of all kinds who join in calling for a major investment of public funds that is directly targeted to improving child care jobs. CCW also offers an annual *Summer Institute* called Leaders in Action for Worthy Wages; leadership and community organizing training through the *Leadership Empowerment Action Project (LEAP)*; and community-based training on *Taking On Turnover.*

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HIGHLIGHTS OF THE STUDY

Then and Now: Changes in Child Care Staffing, 1994-2000 is the first large-scale longitudinal study based on observations of quality in the same child care[1] centers in three California communities at three points in time (1994, 1996, and 2000). Through interviews with teachers and directors, the study captures the characteristics of teachers and directors who stay at, leave, and enter centers over time, and provides information about where they go when they leave their jobs. Further, it addresses questions about how the instability of teaching and administrative staff impacts efforts to improve and maintain the quality of centers.

The first and second phases of this study focused on centers seeking NAEYC accreditation, and our 2000 sample includes many centers that were accredited and/or rated high in quality using the nationally recognized Early Childhood Environment Rating Scale.[2] Thus, while not representative of child care in the United States, the results of this study are appropriately viewed as reflecting the "best" that this country currently has to offer.

The majority of the centers in the 2000 sample were operated on a non-profit basis, located in census tracts characterized by households with middle incomes, and received revenues primarily from parent fees. Approximately one-quarter of the centers were located in low-income communities and offered care subsidized by government funds. There were no major differences between subsidized and non-subsidized centers with regard to quality or staffing.

Seventy-five child care centers (representing 85 percent of the programs participating in 1994 and 1996) participated in the current study. Interviews with current and former directors and teaching staff, as well as classroom observations in a sub-sample of 43 centers, resulted in the following findings:

Stability of Teaching Staff

- ***The teaching staff workforce is alarmingly unstable, even among this group of teachers in relatively high-quality programs.***

Three-quarters (76 percent) of all teaching staff employed in the centers in 1996, and 82 percent of those working in the programs in 1994, were no longer on the job in 2000.

- ***Year-to-year turnover and the inability of centers to replace staff also contribute to instability.***

For example, average turnover rates between 1999 and 2000 were 30 percent for all teaching staff. While one-quarter of centers reported no turnover in the previous year, six centers reported 100 percent or more turnover of their assistants and nine reported 100 percent or more turnover of their teachers in the previous year. Over half the centers reporting turnover in the last year (56 percent) had not succeeded at replacing all the staff they had lost.

[1] In our usage, the term "child care" embraces a continuum of services ranging from those established specifically to care for children while their parents are at work, to those established primarily to provide an educational enrichment experience for young children. In practice, most programs for young children, including those in this study, include elements of care and education.

[2] The *Early Childhood Environment Rating Scale (ECERS)*, the most widely used global assessment of child care classroom quality, is a 37-item scale focusing on the day-to-day quality of classroom environments, activities and interactions (Harms and Clifford, 1980).

• ***Despite recognition that higher wages contribute to greater staff stability, compensation for the majority of teaching staff positions has not kept pace with the cost of living.***

Wages for the majority of teaching staff positions, when adjusted for inflation, have decreased (six percent for teachers and two percent for assistants). The small number of teaching staff who remained on the job between 1996 and 2000 experienced only a two percent wage increase after adjusting for changes in the cost of living. Between 1992 and 1997, average wages for K–12 teachers in California increased by nine percent (American Federation of Teachers, 2000). On average, teachers earned $13.52 an hour for a 12-month year full-time equivalent salary of $24,606; this amount is slightly more than half the average public school teacher salary which is based on a ten-month year.

• ***Teaching staff reported that high turnover among their colleagues negatively affected their ability to do their jobs, and, for some, contributed to their decision to leave. The vast majority of teachers recommended improving wages as essential to stemming turnover.***

Teaching staff who left their jobs were asked their recommendations for reducing turnover at their former centers. Three-quarters suggested improving wages and benefits. When asked what they would recommend to reduce turnover in the field at large, 88 percent recommended improved pay.

• ***Child care teaching staff derive a great deal of satisfaction from their jobs.***

Despite understandable complaints about low pay and lack of recognition for their work, over two-thirds (69 percent) of the teaching staff observed in 2000 would recommend teaching in child care as a career choice. Two-thirds (67 percent) of former teachers contacted for the study also recommended child care teaching as a career.

Stability of Center Directors

• ***Director turnover is exceedingly high, and contributes to staff instability.***

Forty percent of the participating centers in 1996 had a new director in 2000 and two-thirds of centers that lost a director reported having two or more directors in the last four years. Between 1994 and 2000, 51 percent of the centers had new directors. Centers that lost directors also had higher rates of teacher turnover.

• ***While better paid than teaching staff, considering their impressive experience and training, directors' wages are notably low.***

Fifty-four percent of directors earn under $20 an hour, and the average full-time (12 month) equivalent salary for directors in 2000 was $37,571. The recommended statewide starting salary for elementary school teachers in California is $38,000 for a ten-month year.

• ***The staffing crisis negatively affects directors' job satisfaction and their ability to do their jobs.***

While nearly two-thirds of the directors expect to remain in child care work for at least three more years, nearly half (43 percent) of directors employed at the centers in 2000 reported that turnover has negatively affected their own career goals. Only 21 percent say they would take a job in another child care center. Eighty-five percent reported their ability to do their jobs was negatively affected when staff left their centers, and 78 percent reported staff turnover negatively affected the overall organization of their programs.

Changing Characteristics of the Center-based Workforce

• ***New teaching staff as a whole were significantly less-well educated than those they replaced, while there were no differences in professional backgrounds between former or new directors.***

Among all teaching staff, newcomers had completed fewer years of education and formal early childhood training than had those they replaced. Nearly half of those who left had completed a bachelor's degree, compared to only one-third of new teachers. Teaching staff who left the program were no less educated than were those who remained at their centers.

• ***The demographic profiles of teaching staff who stayed on the job and those who left, as well as all groups of directors, are remarkably similar. New teachers, on the other hand, were less likely to live in households that met the self-sufficiency standard for their communities.***[3]

In 2000, 87 percent of teachers who had been on the job since 1996 lived in households which met or exceeded the self-sufficiency wage for a family of their size in their county. Significantly fewer new teachers (68 percent) met this standard.

• ***When teaching staff and directors leave their centers, only half continue to work in child care.***

Fifty-one percent of former teaching staff were working in the child care industry when we contacted them in 2000, most as center teachers. Thirty-nine percent of directors who had left accepted positions as directors or assistant directors at different programs, and 11 percent were employed in child care agencies, such as a resource and referral agency or as a teacher in another center. On average, teaching staff working in non-child care related industries earned significantly higher wages (approximately $4 per hour or $8,000 per year on average) than those who accepted new child care jobs.

Retaining Skilled Staff

• ***Centers paying higher wages are better able to retain qualified teachers.***

Centers paying higher wages also had lower overall teaching staff turnover in the previous year. Centers with no staff turnover paid significantly higher wages than centers with turnover, whether the turnover was moderate or high.

• ***Centers that pay higher wages to directors, as well as to teaching staff, are better able to retain both groups of workers. Centers that lost their directors were more likely to employ teaching staff who were harsh in their interactions with children.***

Even though their qualifications were similar, directors who were no longer on the job in 2000 earned significantly less per hour ($14.47) in 1996 than did those who remained on the job ($17.27). This difference translates to more than $5,000 per year for full-time directors. Directors who left also worked in programs that paid lower average wages in 1996 to teachers ($12.21 per hour) than centers in which directors remained ($14.86 per hour). Wages for assistant teachers, however, were not significantly different in centers that kept or lost their director. Teacher behavior varied by director stability. In centers that lost their directors, teaching staff were rated as harsher toward children than teaching staff in centers where the director did not change.

• ***Highly-skilled and educated teaching staff are more likely to remain at their jobs if they earn higher than average wages, and work with a higher***

[3] Teaching staff are classified as *self-sufficient* if they meet a county-specific standard, based on cost of living, and household size and income, that ensures only the barest minimum that working family heads need to meet their basic needs, without public subsidies or private/family assistance.

percentage of well-trained[4] teaching staff who also remain on the job. For all teaching staff, highly-trained teachers were more likely to leave their jobs if they earned lower wages, worked in a climate with less stability of highly-trained co-workers, and worked with a greater percentage of teaching staff who did not have a bachelor's degree.

Among all teachers who had completed a bachelor's or graduate degree and specialized early childhood training, there was a wage difference of more than $3 per hour between those who stayed and those who left. This difference translates to over $6,000 per year for full-time employees. Even those child care teachers at the highest level of pay and experience earn at least $10,000 less per year than the *average* California K–12 teacher with equivalent education ($46,326 per year) and $6,000 less than *starting* teachers ($38,000 per year) (American Federation of Teachers, 2000).

Sustaining Quality

- ***The presence of a greater proportion of highly-trained teaching staff in 2000 is the strongest predictor of whether a center can sustain quality improvements over time. Wages is also a significant predictor.***

The presence of a greater percentage of highly-trained staff was predicted by the percentage of teachers with high-educational background who stayed at the center between 1996 and 2000, and higher wages paid to teachers.

- ***Approximately one-third of observed centers sustained high quality between our second and third visit.***

Centers rated high in quality in the sample in both 1996 and 2000, based on the Early Childhood Environment Rating Scale (ECERS), were considered for this study to have sustained high quality care. Thirteen of the forty-three centers (32 percent) in the sub-sample of observed programs in 2000 met these criteria. All but two (85 percent) were NAEYC-accredited at both visits, reflecting the larger proportion of high-quality programs among the accredited group.

- ***NAEYC-accredited programs, as a group, continue to demonstrate higher overall quality than other non-NAEYC-accredited programs. However, NAEYC-accredited programs did not experience significantly lower turnover among teaching or administrative staff between 1996 and 2000 or between 1999 and 2000 than non-accredited programs in our sample.***

Only those NAEYC-accredited programs that pay higher than average salaries are able to attract highly-skilled staff and thus sustain quality over time. In 2000, nearly 30 percent of the NAEYC-accredited centers were rated as mediocre in overall quality. In 1996, 39 percent of NAEYC-accredited programs were rated as mediocre. Thus, although as a group, NAEYC-accredited programs are significantly higher in quality, NAEYC accreditation is not a guarantee of high quality or of a program's ability to sustain quality over time.

For a fuller discussion of the findings, see Chapters 3–6.

For a discussion of the conclusions and recommendations, see Chapter 7.

[4] *Highly-trained teacher* is defined in this study as having a bachelor's degree and specialized early childhood courses at the college level.

PURPOSE AND GOALS

CHAPTER 1

This chapter describes the purpose of the present study, delineates the major research questions addressed, and reviews previous research related to staff continuity and program quality.

INTRODUCTION

The critical shortage of elementary and secondary school teachers pervades the national consciousness. Knowledge of the problem is not restricted to those most directly affected by it, such as families, educators and policymakers. Short of avoiding all broadcast or printed news, it would be difficult for anybody to remain unaware of the need for K-12 teachers or the many recruitment efforts underway.

In contrast the "other" teacher shortage–an insufficient pool of workers to care for and educate young children prior to Kindergarten–seldom registers on the radar screen of public awareness. Parents who must reassure anxious children in light of yet another teacher departure, or face a program closure due to lack of personnel, know the problem only too well. Directors and teachers in programs are acutely aware of the dearth of qualified co-workers. And, a growing contingent of policymakers and business leaders recognize that appropriately-prepared teachers are required to expand Pre-Kindergarten programs, which are widely viewed as essential to readiness for and later success in school. Still, on balance, the shortage of teachers for our youngest children fails to capture the attention of the American public or the majority of its leaders.[1]

Yet the question of who will teach our children is as pressing at the preschool level, if not more so, than for older grades. The U.S. Department of Education estimates that well over 1 million new teachers must be hired for K-12 classrooms by 2010, representing approximately forty percent of the existing corps of teachers (Hussar, 1999). Many will be replacing those leaving for retirement or due to dissatisfaction on the job, while others will be required because the movement toward smaller class sizes creates a need for more teachers.

Similar forces–turnover and increased demand–are at work in early care and education programs. But the average rate of departure from child care jobs (30 percent per year) is more than four times greater than that for elementary school teachers (seven percent per year) (Whitebook & Bellm, 1999). Regardless of the age of students, low pay and lack of prestige affect teachers' decisions to leave their jobs or discourage entry into the occupation. These issues are intensified for preschool teachers. Those with comparable education and training to elementary school teachers earn approximately half as much, work a longer year and receive fewer benefits, such as fully-paid health coverage and a pension (Whitebook & Bellm, 1999).

The question of who will teach our children is as pressing at the preschool level, if not more so, than for older grades.

The teacher shortage in early education fuels and reflects a crisis in the quality of services. The consistency and skills of the teacher emerge repeatedly in research as the key determinant of high-quality care (Shonkoff & Phillips, 2000). Without a skilled and sta-

[1] A *Newsweek* cover story (October 2, 2000), entitled "Teachers Wanted," made no mention of Pre-Kindergarten or child care teachers.

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"Mommy, who's going to be my teacher today?"

"Mommy, who's going to be my teacher today?" a four-year-old boy asked his mother on the way to child care one morning. There should have been a simple answer: why, his new teacher Nancy, of course. But his anxiety underscored a far from simple problem: there had been three changes in caregivers at the program over six months' time, and his nagging sense of doubt was only matched by the knot growing in his mother's stomach.

When the boy asked, "And is Nancy going to stay?" his mother did her best to reassure him that Nancy would be there at least until he left for Kindergarten. So his expression lightened, and he proceeded to rattle off a list of things he liked to do with his teacher.

But the truth was that his mother didn't know whether Nancy—or any of the teachers, for that matter—could afford to finish out the year, even though she also knew her son couldn't afford for them to leave. He had faced enough change already, and it was diminishing his sense of trust in the world at an age when building trust is all-important. What could she really say or do to ease his mind?

Excerpted with permission from *Taking on Turnover: An Action Guide for Child Care Center Teachers and Directors* (Whitebook and Bellm, 1999).

ble workforce, efforts to provide growth-enhancing experiences for children are severely constrained. This crisis, while recently intensified, is not new. Over the last thirty years, research has documented the mediocre quality of many programs, as well as the importance of child-related training and education for teachers and directors (Keyserling, 1972; Coelen, Glantz, & Calore, 1979; Cost, Quality and Child Outcomes Study, 1995; Whitebook, Howes & Phillips, 1990). In 1990, for example, the *National Child Care Staffing Study* clearly documented the relationship among high staff turnover, low-quality services, and negative consequences for children in center-based care (Whitebook, et al., 1990).

To address this crisis in quality, many initiatives have been developed in recent years. Most have focused on promoting a *skilled* workforce, through professional development programs or private accreditation, the most well-known through the National Association for the Education of Young Children (NAEYC). Funders and policymakers have readily embraced these efforts. In stark contrast, efforts to *recruit* or *stabilize* this workforce, except within the better-funded and federally operated sectors of military-sponsored child care services and Head Start, have been few and far between (Bellm, Burton, Shukla, & Whitebook, 1996).

STUDY OVERVIEW

The current study explores the effect of the staffing crisis on efforts to improve and maintain center-based quality. It represents the last phase of a three-part study begun in 1994, which centered on three Northern California communities. (See Chapter 2 for a detailed discussion of the study design and sample.) It is one of only a handful of longitudinal studies of quality in child care.[2] It is the first to conduct observations of quality in the *same* centers at three points in time, as well as the first to track teachers and directors employed in these programs over

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NAEYC Accreditation as a Strategy for Improving Quality

Voluntary accreditation through the National Association for the Education of Young Children (NAEYC), the largest professional organization in the early care and education field, is one of the most widely promoted and implemented child care quality enhancement strategies in the United States (Bredekamp and Glowacki, 1996). NAEYC accredits center-based programs that undergo a quality assessment process (called "self-study") and that meet standards of program operation identified by NAEYC as indicative of good-quality service (National Association for the Education of Young Children, 1991). There is modest emphasis in the self-study process on staff stability or compensation (National Association for the Education of Young Children, 1998).

Accreditation status is conferred for three years, at which time programs are required to undergo a modified self-study process to become re-accredited. (See Whitebook, Sakai and Howes, 1997 for a review of the NAEYC accreditation process.) NAEYC established accreditation 15 years ago in response to the lack of national standards for early childhood practice and to promote efforts to improve quality within centers (Galinsky, 1990). NAEYC now accredits 7,700 programs throughout the country, with an additional 8,500 engaged in the self-study process.

In recent years, millions of public and private dollars have been targeted toward helping centers achieve NAEYC accreditation, and 18 states now provide differential reimbursement rates to NAEYC-accredited centers (Gormley and Lucas, 2000). As the number of NAEYC-accredited centers increases, consumer awareness of, and reliance on, NAEYC accreditation as an indicator of quality have also grown. When choosing a program for their children, more and more parents are asking about NAEYC accreditation status, thus rendering it an important marketing devise (Bredekamp and Glowacki, 1996).

time. Importantly, the programs comprised a sample of relatively high-quality child care. Thus, while not representative of center-based child care in the United States, the results are appropriately viewed as reflecting the "best" that this country currently has to offer.

The goal of the first two phases of the study (1994 and 1996) was to assess NAEYC accreditation as a strategy for improving center-based child care quality in the United States. It explored whether providing support to centers seeking to become accredited was a sound investment of public and private quality enhancement resources. The study sought to compare initial levels of quality and types of assistance provided among centers that did and did not achieve NAEYC accreditation, and to determine the extent to which NAEYC accreditation contributed to building a skilled and stable early care and education workforce (see Appendix A: Highlights of Study Findings, 1997).

[2] In our usage, the term "child care" embraces a continuum of services ranging from those established specifically to care for children while their parents are at work, to those established primarily to provide an educational enrichment experience for young children. In practice, most programs for young children, such as those in this study, include elements of care and education. In Chapter 2, we describe the particular characteristics of the center-based programs in this sample.

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Teaching staff stability emerged as a strong predictor of which programs succeeded at becoming accredited. The retention of skilled teachers, in combination with non-profit status, higher wages paid to teaching staff, and NAEYC accreditation, predicted higher program quality ratings.

These findings about the role staff stability plays in improving quality led us to design a third visit to the programs to assess not only whether centers that achieved NAEYC accreditation sustained their level of quality over time, but also to document the characteristics of staff who stayed at, left, and entered the programs since our previous visit. We waited four years to revisit the centers, by which time the accredited centers in the sample that sought re-accreditation had been required to undergo another assessment by NAEYC.

The current study was designed to assess changes in staffing in center-based programs between 1994-2000. During this period, the communities represented in the study experienced an economic boom characterized by low unemployment, rising housing costs, and an abundance of job opportunities in the public and private sectors. Notably, the California Legislature implemented a statewide policy to reduce the size of all public Kindergarten through third grade classes, which resulted in many new jobs in public elementary schools for those with bachelor's degrees.

At the third point of data collection in 2000, we interviewed directors and teaching staff at all the original centers that remained open and agreed to participate, and observed a sub-sample of these programs as detailed in Chapter 2. Specifically, the study explores the compensation, working conditions, and educational and demographic background of those who comprise the child care teaching and administrative staff over time, and the implications of the various characteristics of these individuals and their jobs on the quality of care centers are able to achieve and maintain.

Our investigation points to alarming instability in a relatively high-quality segment of the child care industry, during a period of increased demand and investment in services. As elaborated below, the study has three major goals.

Goal One

To examine the extent to which centers undergo changes in teaching and administrative staff over time, and to identify factors associated with stability and instability of personnel.

Job turnover–calculated by determining the percentage of staff who cease their employment within a twelve-month or other specified period–discourages the development and maintenance of consistent relationships between children and their caregivers. The rate of turnover among teaching staff influences the quality of care that programs provide and affects children's social-emotional and language development. In the three most recent large-scale studies of child care, higher turnover rates among staff were linked to lower-quality services (Helburn, 1995; Kontos, Howes, Galinsky, & Shin, 1995; Whitebook, et al., 1990).

Specifically, in the *National Child Care Staffing Study*, centers with higher turnover were characterized by classrooms with less developmentally appropriate environments and activities, and teaching staff in these programs interacted less sensitively and appropriately with children. Helburn and her colleagues (1995) also demonstrated a link between turnover and quality in the *Cost, Quality and Child Outcomes in Child Care Centers* study. Centers with staff turnover rates of 10 percent or less per year were rated significantly higher in a combined measure of quality that included structural features (e.g., staff-child ratios, group size, and

The rate of turnover among teaching staff influences the quality of care that programs provide and affects children's social-emotional and language development.

staff characteristics) and process variables (e.g., interactions between adults and children) than those centers with higher turnover. Likewise, in a study of family and relative care, Kontos and colleagues (1995) found that home-based providers who continued to offer care a year after being observed were initially rated as higher in global quality.

Low wages have been identified as a major reason for high turnover and the mediocre quality of most child care services in the U.S. (Phillips, Mekos, Scarr, McCartney & Abbott-Shim, 2000; Helburn, 1995; Whitebook, et al., 1990). The release of the *National Child Care Staffing Study,* which first drew attention to the relationship between wages, turnover and child care quality, generated vigorous debate about the relative contribution of wages to maintaining a skilled and stable workforce. Subsequent research (Phillips et al., 2000; Helburn, 1995; NICHD, 1996; Whitebook, et al., 1997) has replicated these earlier findings. In our earlier examination of centers in this sample, we sought to clarify the role of wages by contrasting it with other variables that have been associated with turnover. We examined whether workplace and individual characteristics differentiate high- and low-skilled teaching staff who stay at or leave their jobs over time, and identified characteristics of centers that predict greater retention of high-skilled teaching staff.

We found that highly-skilled teaching staff who remained on the job between 1994 and 1996 earned approximately $2 an hour more than equally-skilled teaching staff who left their jobs. In addition to receiving higher-than-average earnings, skilled teaching staff were more likely to remain on the job if they worked with a higher percentage of well-trained teaching staff, and in a climate where other well-trained and educated teachers and the director remained on the job (Whitebook, et al., 1997). In this report, we document the extent and causes of turnover for teaching and administrative staff in these centers over a six-year period and identify characteristics of centers that experience greater workforce stability.

Goal Two

To identify differences in professional preparation and family characteristics among those who stay at, leave and enter centers over time, and to determine the extent to which those who leave their centers remain in the field.

For most of the 1980's and 1990's, the most rapid turnover occurred among the least qualified staff, who typically earned the lowest wages and had received minimal or no college-level education or specialized early childhood training (Helburn, 1995; Whitebook et al., 1990). More recently, increased job opportunities in other industries appear to be drawing teachers with college degrees in early childhood education away from child care jobs or dissuade their seeking employment in child care altogether (Whitebook, Burton, Montgomery, Hikido, & Chambers, 1996). As a result, many directors informally report lowering the qualifications for new hires or being forced to hire candidates they do not feel are as qualified as those they are replacing (Whitebook & Bellm, 1999; Whitebook, Howes, & Phillips, 1998).

Previous research has failed to document these trends because it has focused either on workers at one point in time (Helburn, 1995, Kontos, et al., 1995), or has followed a group of centers, but did not collect information beyond the initial visit about the composition of the center's staff or maintain contact with teaching staff for more than six months beyond the initial visit (Whitebook, Phillips, & Howes, 1993; 1998). This study differs from previous efforts in both respects. It includes a census of the center staff at three points in time (1994, 1996, and 2000) permitting comparison of the overall educational background and professional preparation of all staff at each visit, thus answering questions about the changing characteristics of the child care workforce.

Additionally, follow-up conversations with many of the teaching staff and the directors interviewed in 1996, both those who stayed and those who left, provide deeper insight into who is able to sustain child

care employment and where those who leave go. This latter information helps us to assess not only job, but also occupational turnover. It documents who is moving to other forms of child care employment, or educational settings for children or adults, or leaving work with children altogether. Interviews with staff who joined the programs in our sample after 1996 provided further information about movement within the field, and in some cases, about those entering the occupation.

Goal Three

To assess the relationship between instability of staff and sustaining and improving the quality of care.

Caregivers' ability to facilitate children's development requires stable relationships. Even the most skilled provider cannot establish a positive relationship with children unless they are consistently available to nurture them and build trust. And indeed, more stable providers tend to foster more secure relationships with children in their care, which in turn supports more secure and prosocial behavior by children (Oppenheim, Sagi & Lamb, 1988). Children with more secure relationships with their child care provider engage in more competent interactions with adults and more advanced peer play (Howes, Matheson, & Hamilton, 1994; Howes & Hamilton, 1992; Howes, Rodning, Galluzzo, & Myers, 1988). Aggression increases when children experience frequent changes of providers (Howes & Hamilton, 1993; 1992).

However, stability, in and of itself, does not result in skilled caregiving or quality programs. Experience as a child care provider, for example, has not been found to consistently lead to high-quality caregiving (Helburn, 1995; Kontos, et al., 1995; NICHD, 1996; Whitebook, et al., 1990). Specialized training in child development and formal education levels, in contrast, have both been found consistently to predict high-quality interactions and children's development in center-based care and home-based arrangements. Thus, the challenge facing programs seeking to improve and maintain quality involves both minimizing overall turnover and maximizing the stability among more skilled members of the workforce.

In the earlier phases of this study, there was no significant difference between NAEYC-accredited and non-accredited centers with respect to turnover. All centers in the sample–including NAEYC-accredited centers–had turnover rates for teaching staff that approached or exceeded 50 percent in the 20-month period between our first (1994) and second (1996) visits to the centers. Quality did affect turnover, however. Centers–whether accredited or not–that retained a greater percentage of *highly-skilled teachers* were significantly more likely to receive good or better ratings on overall classroom quality. Skilled teaching staff were more likely to remain at their jobs if they were employed by non-profit programs, earned higher-than-average wages, worked with a higher percentage of well-trained teaching staff, and worked in a climate where other well-trained and educated teachers (as well as the director) remained on the job.

Not surprisingly, the earlier phases of this study also found that greater stability among staff influenced program quality not just at one point in time, but over time as well. Centers that achieved NAEYC accreditation experienced less teaching staff turnover during the self-study phase than did other centers participating in self-study that did not become accredited. We already know, therefore, that stability affects the ability of programs to improve their quality. The question for the current study is whether teaching staff and director stability also affect programs' ability to *sustain* improvements in learning environments for children.

STUDY DESIGN

CHAPTER 2

This chapter provides detailed information about the study sample, procedures for collecting and analyzing data, and descriptions of key variables used in the analyses.

OVERVIEW

Originally, this study was designed to examine NAEYC accreditation as a strategy for improving center-based child care.[1] In 1994 and 1996 we examined the quality of services offered by 92 child care centers in three Bay Area communities of Northern California. The sample included centers seeking NAEYC accreditation and centers providing services in the same community but not seeking accreditation. Centers were visited twice: in 1994, and again approximately two years later in 1996.

The child care staffing crisis, already very apparent in the mid-nineties, has increased during the last four years, driven in part by a strong economy in the communities under examination and throughout the country. This follow-up study was designed to assess child care staffing in center-based care, and how current conditions influence centers' ability to maintain quality. We examined compensation, working conditions, and the educational and demographic background of those who comprise the child care teaching and administrative staff in 1994, 1996, and 2000, and identified characteristics of staff and centers that helped retain highly-skilled teaching staff. In addition, we explored the implications of the various characteristics of these individuals and their jobs on the quality of care centers are able to provide.

Classroom observations and interviews with center directors and teaching staff provided information about characteristics of the centers and program quality, as well as qualifications, continuity and compensation. This is the first longitudinal study of its kind to track the director and teaching staff workforce and identify characteristics of the workforce who stay at, leave, and enter centers over time. (See Glossary for a description of terms used throughout this chapter and report.)

THE SAMPLE

Original Sample 1994-1996

Ninety-two centers comprised the sample in 1994 and 1996. Observations and interviews were conducted in all 92 centers: two preschool classrooms were visited in each center, unless the center had only one preschool room. Centers served children of varying age ranges, however observations were conducted only in classrooms that served two-and-a-half to five year-olds.

The centers were located in the Northern California counties of Santa Cruz, San Mateo and Santa Clara. In each of these communities, local agencies had initiated support groups to assist child care centers in the NAEYC accreditation self-study process. These communities share certain features, including a mix of high-, middle-, and low-income neighborhoods. Income level for this study was based on census tract household income. Sixty-three percent of the centers in the original sample provided service in middle-income neighborhoods, while 27 percent served low-income and 10 percent served high-

[1] We use the term center-based child care to refer to group care outside a home environment. Child care may be operated by diverse entities including companies established to operate child care businesses, churches, single or multi-purpose nonprofit agencies, public schools, labor unions, or employers such as hospitals or government agencies. Recognizing that their personnel and clients may not label the service as child care, here we include Head Start and publicly-funded Pre-Kindergarten (Pre-K) programs as center-based child care.

income areas. Centers represented a variety of center-based programs operating on a for-profit and non-profit basis. (See *NAEYC Accreditation as a Strategy for Improving Child Care Quality: An Assessment* for a detailed description of the initial sample selection process. Whitebook, et. al, 1997).

Comparison of the 1996 Sample with Other Local and National Samples

At the time of the last report we compared our sample with national and local samples of center-based child care with regard to center structure, observed quality, teaching staff background, wages, benefits, working conditions and teaching staff stability and turnover (Burton, Sakai, & Whitebook, 1996; Burton, Whitebook, & Sakai, 1992; Cost Quality and Child Care Outcomes Study Team, 1995; Mihaly, 1995). (See pp. 27–35, *NAEYC Accreditation as a Strategy for Improving Child Care Quality: An Assessment*, for a detailed comparison with national and community samples.) Centers in the original sample were similar in size, income sources, and observed classroom quality when compared to centers in other communities and across the country. Annual rates of turnover were similar to those found in other California studies and somewhat lower than national reports (see Appendix A: Table 1).

Teaching staff had completed somewhat more formal education and specialized early childhood training than their counterparts in the rest of California and the nation (see Appendix A: Figure 1). Reflecting their higher levels of education as well as the local cost of living, teaching staff and directors in the sample earned higher salaries than those represented in the national sample, but average compensation for their communities. Teaching staff were rated as "more sensitive" and "less harsh" than in other studies, perhaps in part a reflection of their higher levels of education and training (see Appendix A: Table 2). These comparisons support the characterization of centers in the original sample as somewhat higher in quality than the range of programs found nationally.

Comparison of Accredited Centers in the Sample and Nationally

Because our sample was drawn from three neighboring communities in one state, we were concerned that our pool of accredited centers might differ from the larger pool of NAEYC-accredited centers across the country. As detailed in Appendix A: Figure 1, our group of accredited centers was similar in size and hours of operation to other NAEYC-accredited programs as of Fall, 1996.

The 2000 Sample

In 2000, project staff recontacted all centers that participated in 1996 that were still in operation. As indicated in Figure 2.1, 75 centers agreed to participate (85 percent of the 1996 sample), 11 programs had closed (12 percent) and six centers declined to participate in the study (eight percent). Participating centers included 20 for-profit centers and 55 nonprofit centers. Three for-profit and three nonprofit programs were sponsored by a business or corporation. Fifteen nonprofit centers were sponsored by a church or religious group and eight were government sponsored programs serving low income children exclusively. The remaining centers were local community nonprofit programs.

There were no differences with regard to teaching staff wages, staff and director turnover, percent of highly-skilled staff employed at the center, and overall center quality between subsidized and non-subsidized programs with one exception. Directors at government-subsidized programs earned more per hour (M=$25.65 per hour, SD=9.36) than directors at non-subsidized programs (M=$19.37, SD=6.00).

Centers served families who were ethnically and linguistically diverse. Teaching staff reported that on average, 39 percent of the children in their class were children of color. Nearly half of the classrooms had children whose home language was not English.

Meeting the Linguistic Needs of Children and Families

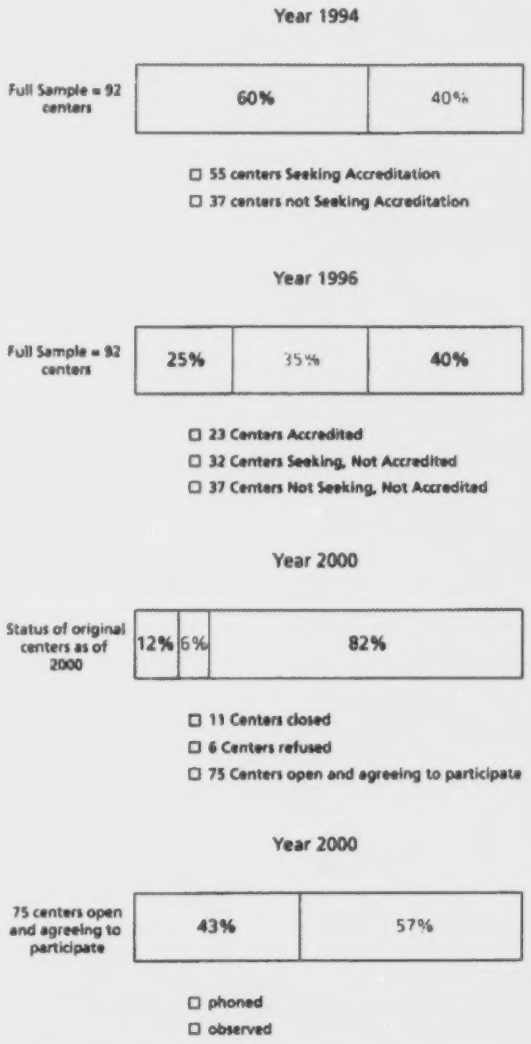
In an increasingly diverse society, quality of care cannot simply be measured by the classroom environment and activities, but must also include an assessment of the ability of teaching staff to communicate with children and families from various backgrounds, many of whom speak languages other than English (Chang, Muckelray, & Pulido-Tobiassen, 1996; Chang & Sakai, 1993; Phillips, 1996).

Slightly more than one-quarter of teaching staff in our 2000 observed sample reported that parents had difficulty communicating with staff at their center because of language barriers. This is comparable to our findings for 1996.

- All observed classrooms with children who spoke English had teachers who spoke English also.
- Forty-four percent of classrooms had Spanish-speaking children, but only half of these classrooms were staffed by at least one Spanish-speaking teacher.
- Nearly half of the classrooms in the study had Chinese-speaking children (49 percent), but only seven percent of these classrooms had a Chinese-speaking staff member.

Accredited programs were significantly less likely to employ Spanish-speaking teachers in centers with Spanish-speaking children, but there were no differences between NAEYC-accredited and non-accredited centers with respect to Chinese-speaking children and staff. The linguistic match between children and teaching staff in 2000 was marginally better than in 1996.

Figure 2.1 Description of the Sample: 1994, 1996, 2000



Observed or Interviewed-Only Sub-samples

The 2000 sample included 75 centers that agreed to participate in the study. Because limited resources precluded visits at all centers, we had to select a sub-sample of centers to observe. The 75 centers were thus divided into two groups:

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Observed Centers Sub-sample

Forty-three centers comprised the group referred to as observed centers throughout this report. This group included all but one of the 1996 NAEYC-accredited centers that were open and willing to participate (n=19), but only a sub-sample of 1996 non-accredited programs (n=24). Therefore a greater proportion of the centers we observed were high in quality. The 24 non-accredited centers consisted of two types: those that had sought but failed to achieve accreditation between 1994 and 1996, and those that had not sought accreditation. They were matched to the accredited centers by nonprofit or for-profit status (center auspices) and income level of the census tract in which they were located.

All of the non-accredited programs in 1996 were stratified by center auspices and income level and selected randomly for the observed or interviewed-only groups. There were no significant differences between observed and interviewed-only centers with respect to center structure, staff wages, annual turnover, or educational background of staff.

Interviewed-Only Sub-sample

Thirty-two centers comprised the group of centers referred to as the interviewed-only centers throughout this report. This group also included centers that had not sought accreditation, or had sought but not achieved accreditation, between 1994 and 1996. One center that was accredited in 1996 declined our visit but was willing to participate in the interview part of the study.

Centers that Closed or Declined Participation

Centers that closed or declined participation did not differ from centers that participated with respect to auspices (for-profit or nonprofit status), center income level (based on census tract records of household income), hours of operation, size, staff and administrators' wages, teaching staff turnover, or the educational background of staff. The 2000 sample, as a result, is somewhat higher in quality than the 1996 sample. Centers that closed and declined participation did differ from centers participating in 2000 with respect to overall quality ratings: closed and declined centers received lower ECERS scores in 1996 (Mean=4.04; SD=.99) compared to participating centers (Mean=4.52, SD=.88; $t(90)=-1.98$, $p=.05$).

Characteristics of the Full 2000 Sample and Comparisons to Other Local and National Samples

Center Structure

Center structure, size, and sources of revenue were similar in observed and interviewed-only centers to state and national samples. Seventy-two percent of participating centers were nonprofit. The majority of centers (65 percent) were from a middle-income area.

Observed Quality

The 2000 sample of centers however, reflects higher levels of quality than the 1996 sample and/or other centers in the state and country in several respects. A higher proportion of centers were rated as "good" on the ECERS (53 percent) compared to the 1996 sample (25 percent) and nationally (18 percent). Teachers' were also rated as more sensitive, and less harsh and detached than in the 1996 and national samples using the Arnett Scale of Adult Involvement.

Teaching Staff Background

Teaching staff had completed somewhat more formal education and specialized early childhood training than staff in national samples. Only seven percent of all teaching staff employed in 2000 had less than six college credits of early childhood training. Forty-one percent completed a college degree and 20 percent had an advanced degree in early childhood or a related field. Nationally, 26 percent of staff completed a college degree (Cost, Quality and Child Outcomes Study Team, 1995).

Teaching Staff Wages and Turnover

Staff wages were higher than those represented in the national sample, but average for their communities (Burton, Whitebook, & Gerber, 2000). Based on director reports for all employed teaching staff, the

average current wage in 2000 was $13.52 per hour for teachers, $9.35 per hour for assistants, $17.21 per hour for teacher-directors, and $22.31 per hour for directors.

Directors reported an average 32 percent annual turnover for teachers and 39 percent annual turnover for assistants between 1999 and 2000. These rates are comparable to the California sub-sample of the *Cost, Quality and Child Outcomes Study* in 1995 (31 percent annual teacher and 33 percent annual assistant turnover), but lower than the national rate reported (39 percent annual teacher turnover, 52 percent annual assistant teacher turnover). Despite the better-trained workforce, centers in this study face similar challenges to maintain a stable workforce as do the vast majority of programs nationwide.

Selection of Classrooms and Participants

In observed centers (n=43), we visited the same classrooms that we had assessed in 1994 and 1996. In most cases, this meant that the same physical classroom was observed. In a few cases, teachers who were observed in 1996 changed their classroom, and we observed the teacher in her new classroom. This represented only a few observed classrooms. A total of 67 classrooms were visited in 2000. Data were collected during the first half of 2000.

Center Directors

We interviewed the director in each center to ensure that a person with an overview of center operations and access to center records could provide details about finances, salaries, turnover, and related information. As in 1996, we also sought to explore the opinions and background of the person with program oversight, given the emerging relationship between center quality and director performance (Bloom, 1996b; Helburn, 1995). Directors' job definitions varied, depending on the size and structure of each center. In some cases, directors or assistant directors worked in the classroom along with performing administrative functions; in others, the director's role involved minimal classroom contact and focused primarily on administrative tasks. In large programs that employed a staff person specifically responsible for financial recordkeeping, that person was interviewed in addition to the director about salaries, other center expenditures, and sources and amounts of income.

Because there is growing concern that the staffing crisis includes instability among the director workforce, we also interviewed directors who were no longer at their centers or whose centers had closed. This investigation stands as the first longitudinal study of center administrators and allows us to focus on three groups of directors:

- those employed at their centers in 1996 and 2000;
- those employed at their centers in 1996 but no longer at the centers in 2000; and
- those new to their centers since 1996.

(See Chapter 4 for a detailed description of the director sample.)

Teaching Staff

In 1994, we chose to observe and interview the head or lead teacher in each classroom. Such staff typically set the tone and style for classroom activities and interactions. If a classroom had co-teachers, the teacher who assumed leadership during the visit was selected for the observation, and both teachers were interviewed. If the classroom had an assistant teacher, she/he was selected to participate in the interview in order to capture perspectives on center processes based on differing roles. If more than one non-lead teacher or assistant teacher worked in the same classroom, we used random sampling to select assistants or teachers. In 2000, the same teachers and assistants who participated during the 1996 phase of the study were interviewed and/or observed if they were still employed in the center.

In the 43 centers observed in 2000, we again sought to interview the same teaching staff we interviewed in 1996. A total of 117 teaching staff were

Table 2.1 Characteristics of the 2000 Sample

CHARACTERISTICS	SAMPLE 2000 (75 CENTERS)
Center Structure	
Legal status	72 percent nonprofit
Income area	65 percent middle-income area
Sources of funding	Average=78 percent of funds from parent fees, 16 percent from public funds
Number of children served	Average 72 children (SD=59)
Teaching Staff	
Staff education and training	7 percent less than 6 college units 41 percent with college degree 20 percent with advanced degree in early childhood or related field
Wages, Benefits and Working Conditions	
Average current wages	Teachers: $13.52 per hour; Assistants: $9.35 per hour; Teacher-directors: $17.21 per hour; Directors: $22.31 per hour
Health insurance	54 percent of centers offered fully paid health care to teachers
Teaching Staff Stability and Turnover	
Director reports of annual turnover	Teachers: Average=32 percent turnover; Assistants: Average=39 percent turnover
Center Quality	
Linguistic characteristics	29 percent of teaching staff reported that children in their class have parents who have difficulty communicating with staff because of the language they speak. 44 percent of teaching staff cared for at least one Spanish-speaking child. Only 50 percent of classrooms with Spanish-speaking children employed a Spanish-speaking teacher. 49 percent of teaching staff cared for at least one Chinese-speaking child (Mandarin or Cantonese). Only seven percent of classrooms with Chinese-speaking children employed a Chinese-speaking teacher.
ECERS scores	M=4.93 (SD=.67); 53 percent of centers rated "good" in overall quality
Arnett Scale of Adult Involvement	Sensitivity M=3.51 (SD=.49); Harshness M=1.41 (SD=.35); Detachment M=1.33 (SD=.38)

Table 2.2 2000 Status of Teaching Staff Who Participated in 1996	
1996 Sample	**2000 Status**
260 Observed Teaching Staff	• 42 observed and interviewed teaching staff • 26 interviewed-only teaching staff • 81 teaching staff left their center, found and interviewed • 111 teaching staff left their center, not found

observed and interviewed: 71 percent teachers, 17 percent assistants and 12 percent teacher-directors. In cases where the original teacher had left the center, we interviewed and observed the replacement teacher in the same classroom.

In the 32 interviewed-only centers, we conducted interviews with only those staff members who participated in 1996. Twenty-six staff were at their same center in 1996 and 2000. Differences among staff who remained on the job at observed and interviewed-only centers are detailed in Chapter 3.

We also attempted to reach all of the observed teaching staff who participated in 1996. This included those who were either no longer employed at the same center where they worked in 1996, and those who had worked at a center that either had closed by 2000 or had declined to participate in the study. We successfully contacted 81 staff members who participated in 1996 but had left their center by 2000 (57%). We attempted to contact these staff members to find out their current job circumstances. A comparison of those we contacted and those we were unable to locate is included in Chapter 3 as well.

Table 2.3 Job Titles of Observed Teaching Sample: 1994, 1996, 2000			
	1994 (N=266)	1996 (N=260)	2000 (N=117)
Percentage of Teachers	68	70	71
Percentage of Assistants	23	18	17
Percentage of Teacher-Directors	9	12	12

MEASURES

Measures included interview protocols for directors and teaching staff adapted or developed for the study, as well as two observational instruments routinely used to observe and assess child care center quality and teacher-child interaction: the Early Childhood Environment Rating Scale (Harms & Clifford, 1980)[2] and the Arnett Scale of Adult Involvement (Arnett, 1989).

Interviews

The director and teaching staff interviews were adapted from measures used in *NAEYC Accreditation As A Strategy for Improving Child Care Quality: An Assessment* (Whitebook, et al., 1997). Directors provided information about the compensation and professional background of all staff employed at their centers. Throughout this report, director-reported information

[2] A revised version of the Early Childhood Environment Rating Scale (ECERS-R) was published in 1998. Because we collected data in 1994 and 1996 with the earlier version of the ECERS, and because reliability studies on the two measures were not yet available when we began data collection in 2000, we collected classroom data using both the earlier and revised ECERS. Here we report data based on the earlier version of ECERS to maintain consistency with our previous data. However, a report on our findings of reliability between the two measures is forthcoming.

is used to describe results for all teaching staff. We therefore supplemented director reports with teacher reports about their own compensation and background.

At observed centers, teacher reports were obtained from only those teachers we observed during the classroom observation; that is, a subset of all teachers employed at the center. At interviewed-only centers, teacher reports were obtained from only those teachers we also interviewed in 1996. Teacher interviews were also obtained from teaching staff who were interviewed in 1996 but had left their centers between 1996 and 2000 and whom we could locate in 2000.

Classroom Observations

We selected the Early Childhood Environment Rating Scale (ECERS) for this investigation based on prior research on child care quality and children's experience of care (Helburn, 1995; Kontos, et al., 1995; Whitebook, et al., 1990). The ECERS provides information about appropriate caregiving and activities that occur within a particular classroom.

The ECERS and the NAEYC accreditation self-study criteria (known as the Early Childhood Classroom Observation) assess similar areas of teacher-child interaction, activities, materials and equipment. A comparison of scoring indicates that good-quality care as indicated by the ECERS corresponds to full compliance with a clear majority of NAEYC self-study criteria. We therefore expected that centers accredited by NAEYC would receive ECERS scores of 5 (good) or better. (For a more detailed comparison of the ECERS and the NAEYC accreditation criteria, see Whitebook, et al., 1997.)

To measure adult-child interactions, we selected the Arnett Scale of Adult Involvement, which in previous large-scale studies has been found to predict teachers' engagement with children and children's language development and security of attachment (Helburn, 1995; Howes, Phillips, & Whitebook, 1992). The Arnett Scale is used to rate a single teacher, in contrast to the ECERS, which is used to rate an entire classroom.

The Early Childhood Environment Rating Scale (ECERS)

The **Early Childhood Environment Rating Scale** (ECERS) comprehensively assesses the day-to-day quality of care. *It contains 37 items* organized under seven categories:

- Personal Care Routines
- Furnishings and Displays for Children
- Language-Reasoning Experience
- Fine and Gross Motor Activities
- Creative Activities
- Social Development
- Adult Needs

Individual items are rated from a low of 1 to a high of 7. A rating of 3 on these scales indicates "minimally-acceptable quality," while 5 indicates "good" quality and 7 indicates "excellent quality."

The Arnett Scale of Adult Involvement

The **Arnett Scale of Adult Involvement** measures teaching style. The 26-item scale rates:

- teachers' sensitivity, e.g., their degree of warmth, attentiveness and engagement,
- style, e.g., their degree of harshness, and their level of punitive and critical interactions, and
- detachment, e.g., their level of interaction with, interest in and supervision of children.

A score of 1 indicates that a given behavior is "never true," whereas a score of 4 indicates that the behavior is "often observed." Higher scores for sensitivity and lower scores for harshness and detachment are therefore considered desirable.

PROCEDURES

Observed Centers (n=43)

Two research assistants completed data collection in each center. The research assistant team was comprised of six people with experience in the early childhood field. The entire research team was trained to conduct observations and interviews during a five day training session followed by several practice visits. Inter-rater reliability was established to a criterion of 85 percent agreement for all observational measures prior to data collection. At mid-point, within-site reliability was re-established for all classroom observational measures. Inter-rater reliability remained at an 85 percent level of agreement.

Following the initial phone call to directors, research assistants contacted the directors again by phone to make appointments to collect data at the centers. In each center, data collection began with a two-hour classroom observation. Unless the program only operated in the afternoon, all observations were conducted in the morning. If two classrooms were observed in one center, observations occurred over two days, scheduled consecutively whenever possible. Researchers conducted observations in the same classrooms that were observed in 1996 unless the participating teacher had changed classrooms. In that case, the observation took place in the teacher's current classroom.

Following the observation, the research assistants arranged to interview the teachers, generally during lunch or nap time, sometimes at the end of the day, or if necessary, on another day. The director interviews occurred following the observations, typically in the afternoon. Every effort was made to accommodate participants' schedules with the exception of scheduling interviews prior to observations. Director interviews lasted an average of one-and-one-half to two hours. Teaching staff interviews lasted from one half-hour to one hour.

Interviewed-only Centers (n=32)

During an initial phone call to directors, research assistants made appointments to conduct interviews with directors. Teaching staff that participated in the 1996 study and were currently at the same center were also contacted by phone and interviewed. These teachers, for whom we had personal contact information, were called at home. Directors were informed that staff interviewed and observed in 1996 would be contacted.

Directors and Teaching Staff Employed in 1996 But No Longer at the Centers in 2000

The 260 teaching staff interviewed in 1996 were asked to provide contact information to permit us to contact them in the future. All but five teaching staff members provided this information. After our 1996 visit we did not contact these teachers again until 2000, at which time we sent letters saying we would contact them shortly and would need to update their contact information. We also asked them to return a postcard to indicate whether they were at the same center where they were employed in 1996, and if not, if they were still working in child care.

For those we did not reach through our letters or initial calls, we employed several other strategies: an Internet search, contacting former co-workers, and working with the Survey Research Center at the University of California, Berkeley, which routinely locates people through a variety of databases. We conducted similar strategies for contacting directors, including asking professional organizations to contact directors on our behalf. (See Chapters 3 and 4 for characteristics of teaching staff members and directors.)

PLAN OF ANALYSIS

First, we described each center with respect to structure, observed quality, director and teaching staff background, wages, benefits and working conditions, and caregiver and director stability and turnover. These descriptions were derived separately for all teaching staff and for observed teaching staff and are identified in the text as such.

We then used t-tests, analysis of variance and chi-squares to compare the professional and demographic characteristics of teaching staff and administrative directors and to identify the factors associated with the stability and instability of personnel. We examined differences in professional preparation and family characteristics among teaching and administrative staff who stayed at, left, and were new to the center in 2000, and explored the extent to which staff who left centers remained in the field. We used logistic and multiple regression techniques to test hypothesized relations between different center attributes such as sustained quality, positive staffing and wages as defined below. We also used discriminant function analysis to predict group membership among those who stayed at or left centers from a set of predictors, such as wages, educational background, household income, and age.

VARIABLES DEFINED

We redefined several variables used in previous studies, and created new composite variables for this study. These include: background and background climate, turnover, positive staffing, and sustained quality. Our definition of self-sufficiency, as elaborated below, is based on the work of Diana Pearce (1996).

Teaching and Administrative Staff Background and Background Climate

Because of the variations in job title, functions and requirements across settings, and the intertwined relationship between training and formal education, Howes (1995) and others (Cassidy, Vardell, & Buell, 1995) have re-conceptualized the child care workforce in terms of background levels that combine specialized training at the college level as well as other aspects of teachers' formal education. Their work guided us in defining the background levels used in most of the analyses reported. In this study, both directors and teaching staff were categorized based on six distinctions described below:

Level 1: six credits[3] or less of college-level early childhood training

Level 2: more than six and up to 24 credits of college-level early childhood training

Level 3: at least 24 credits of college-level early childhood training or some type of early childhood certification and additional college courses in other disciplines

Level 4: a completed bachelor's degree in a field other than early childhood or child development

Level 5: a bachelor's degree in a field other than early childhood or child development with at least 24 credits of college-level early childhood training or some type of early childhood certification

Level 6: a bachelor's degree with advanced early childhood training or an advanced degree in early childhood education

Information about the professional background of teaching staff was drawn from two sources. Directors reported information about the education and training background of every teaching staff member employed in the center as well as about their own professional background. Observed staff provided information about their own background during the interviews.

For most analyses, we distinguished between low and high levels of education and training. Most teaching staff had Levels 2 or 3 or Levels 5 or 6 backgrounds. Thus in this report, staff with *low background* levels had 6-24 credits of college-level early childhood training. Staff with *high background* levels had a bachelor's degree and at least 24 credits of college-level early childhood training, some type of early childhood certification or a bachelor's degree with advanced early childhood degree or training. With a sample of less-educated and trained teaching staff, high and low back-

[3] In California, college credits are referred to as units. In California, one college credit (or unit) is based on 15 hours of instruction.

ground might be defined differently. *Background climate* refers to the percentage of teaching staff with high or low background levels that are employed in a center.

Caregiver and Director Stability and Turnover

Turnover data were drawn from three sources. First, directors were asked to provide a census of employees in their center by name (i.e., initials), wage, and educational background. Initials were compared to those provided in 1996 to create an actual count of the number of staff who stayed and left. This source of turnover (labeled *all teaching staff turnover*) is available for all employed teaching staff and provides information about the percentage of individuals who worked in 1994 and/or 1996 who were not employed at the centers in 2000. Directors were also asked to report annual turnover for the year prior to 2000 data collection. This information provided a snapshot of the most recent turnover. To assess director turnover, we calculated the percentage of directors employed in 1996, who were no longer at the centers in 2000. We also collected information about the number of changes in directors centers experienced over four years.

Positive Staffing

Positive staffing is comprised of the following four categories of teaching staff. These are ordered from least to most desirable:

- highly-skilled or educated staff (as defined in the previous section on background) who left their jobs between 1996 and 2000
- minimally-skilled or educated staff who remained at their jobs
- minimally-skilled or educated staff who left
- highly-skilled or educated staff who remained at their jobs

While turnover is always disruptive to children, leaving is probably more desirable than staying for minimally-skilled staff unless those staff can be engaged in training or supervision which improves their work with children.

For observed teaching staff, positive staffing combines information about teacher skill, based on observed teacher sensitivity scores at the 1996 observation and whether the teacher remained on the job in 2000. Teachers with sensitivity scores of three or greater were considered *highly skilled* (range: 1-4). Those with scores below three were considered *less skilled.*

Because assessments of sensitivity were not made on all teaching staff in the sample, background level was used to create the positive staffing variable for all employed staff. Background level, overall quality ratings and sensitivity have been found to be strongly associated in previous research (Phillips, et al., 1996; Helburn, 1995; Whitebook, et al., 1990). Teaching staff with *low background* levels had 6-24 credits of college-level early childhood training. Staff with *high background* levels had a bachelor's degree and at least 24 credits of college-level early childhood training, some type of early childhood certification or a bachelor's degree with advanced early childhood degree or training. We also created and tested a positive staffing variable for observed teaching staff based on educational background.

Turnover Climate

The *turnover climate* of a program is gauged by several factors. First, the overall turnover rate of staff employed at one point in time and no longer employed at the center at a later date, e.g., 1994 to 2000. This is drawn from the center's census data. Second is the directors' report of annual turnover, e.g., 1999-2000. Third is whether the director remained at the center between 1996 and 2000. The fourth factor is based on the characteristics of staff who stay at and leave a program and whether turnover and stability are positive or negative (e.g., positive staffing). For each of the analyses, the text will indicate which of these four components of turnover climate has been used.

Sustained Quality

Centers rated high in quality (overall 5 or higher on ECERS) in both 1996 and 2000 were considered for this study to have *sustained high-quality care.* Sustained quality is comprised of five categories of centers. These are ordered from most to least desirable:

- NAEYC-accredited programs rated 5 or greater on the ECERS in 1996 and 2000
- non-accredited programs rated 5 or greater on the ECERS in 1996 and 2000
- NAEYC-accredited or non-accredited programs rated 5 or greater on the ECERS in 2000 but not in 1996
- NAEYC-accredited or non-accredited programs rated 5 or greater on the ECERS in 1996 but not in 2000
- NAEYC-accredited or non-accredited programs rated below 5 on the ECERS at both visits

Self-Sufficiency

This variable is based on the *Self-Sufficiency Standard for California* which details the self-sufficiency wages for a range of family sizes and compositions for each county in California (Pearce, 1996). The standard assumes that families obtain housing at or below the 40th percentile (that is, the least expensive 40 percent of the housing market). The food budget is slightly more than the "Thrifty Food Budget" used for the poverty line, but is such that only about 30 percent of families with this amount of money are able to meet minimum federal nutritional standards. The self-sufficiency standard, therefore, ensures only the minimum that heads of working families need to meet their basic needs, without public subsidies or private/ family assistance. In this study, we used information about number and ages of children, number of adults contributing to and size of household income, and county self-sufficiency wage to identify whether interviewed teaching staff lived in households that are classified as *meeting* or *not meeting* the self-sufficiency standard in their community. Self sufficiency wage standards were updated for inflation to allow comparison to data collected in 2000.

STUDY REVIEW

A number of experts provided technical, conceptual and policy-oriented reviews of the study design, analyses and findings (see Acknowledgments on pg. i) and made valuable suggestions that improved the design, implementation and dissemination of this report.

FINDINGS: Current and Former Teaching Staff

This chapter provides a description of the teaching staff workforce in 2000, examines the extent to which centers have undergone changes in teaching staff in recent years, and identifies characteristics of teaching staff who stay at, leave, and enter centers over time. It also describes the extent to which those who leave centers remain in the field.

OVERVIEW

The teacher, specifically her ability to establish and maintain a good relationship with a child when bolstered by a supportive work environment, surfaces in study after study as the key determinant of high-quality services and positive outcomes for young children in early care and education settings (Shonkoff & Phillips, 2000). Yet a widespread crisis in recruiting and retaining qualified personnel to work in child care settings plagues the country. Perhaps nowhere is this crisis felt as severely as the San Francisco Bay Area, where the cost-of-living is high, decent paying jobs are plentiful due to a general labor shortage, and statewide education reform reducing the size of Kindergarten through first grade classes has created many opportunities for qualified teachers.

People working in child care describe turnover as a time sponge, an energy drain, or even a plague. Parents refer to turnover as a major upheaval in their lives because it disturbs their children and upsets their daily family life. Employers face their employees' distraction and stress when their child care arrangements are disrupted.

Researchers have confirmed the detrimental effects of high turnover on child care quality and children's developmental outcomes. The *National Child Care Staffing Study* revealed that centers with high turnover were rated lower in quality. Children in these programs spent less time engaged in social activities, and fewer than a third engaged in age-appropriate play behaviors with peers. Children in such centers spent more than half the observation time wandering aimlessly around their classrooms. Turnover also affects children's language development; children experiencing high levels of turnover were found to build vocabulary at slower rates than those in more stable settings (Howes, Phillips, & Whitebook, 1992; Whitebook, et al., 1990).

The *Cost, Quality and Child Outcomes Study,* released in 1995, found that children attending higher-quality programs, which were associated with low turnover rates, had more advanced language and pre-math skills. These children also displayed more positive attitudes toward their child care situation and more positive self-concepts, engaged in better relations with their teachers, and demonstrated more advanced social behavior. The effects of program quality were evident for children from all backgrounds, but children of low-income families were particularly influenced by the quality of their child care arrangements (Helburn, 1995).

While many lament the revolving door in child care employment, there has been little research that reveals the characteristics of individual teachers who leave or remain at their jobs or whether teachers who leave their positions are lost to the child care field.

In the earlier phase of this study, we found that turnover played an important role in distinguishing not only which centers were successful at achieving NAEYC accreditation, but also which of the accredited

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centers provided good quality (as opposed to mediocre) care. The centers that were least successful at becoming accredited reported higher rates of turnover. Among the accredited centers, those that achieved higher levels of quality paid their teachers more and retained more of their highly-skilled staff (Whitebook, et al., 1997).

While many lament the revolving door in child care employment, there has been little research that reveals the characteristics of individual teachers (or home-based providers) who leave or remain at their jobs or whether teachers who leave their positions are lost to the child care field. More than a decade has passed since the National Child Care Staffing Study tracked teachers six months after an initial interview; subsequent follow-ups to that study collected only information from center directors about center characteristics. In the intervening years, no longitudinal studies of center teaching staff have been conducted.

The current study, therefore, offers a unique long-term view of a sizeable group of teaching staff:

- those observed and interviewed at the centers in 1996 but no longer working at the centers in 2000, and interviewed by phone (n=81);
- those observed and interviewed at the centers in 1996 continuing to work at the centers in 2000 (n=68; 26 from interviewed-only centers and 42 from observed centers); and
- those new to centers since 1996 and observed and interviewed in 2000 (n=75).

In addition, directors provided information about all those employed at the centers in teaching staff positions in 1994 (n=728), 1996 (n=672) and 2000 (n=705).

Thus, we were able to explore differences between those teaching staff who stayed and those who left, and compare the 1996 and 2000 teaching staff workforce. In this chapter we explore individual and program characteristics that contribute to teaching staff stability and in Chapter 4 we explore findings for directors. In Chapter 5 we explore individual and program characteristics associated with retention of highly-qualified staff. In Chapter 6, we discuss how, in turn, teaching staff skills, experience and continuity influence program quality.

We remind our readers that our sample includes many centers that were NAEYC-accredited and/or rated high in quality. Our findings, therefore, may not be representative of teaching staff in other communities or among centers representing a greater range in quality.

METHODOLOGY

We interviewed the director to learn about the characteristics of all teaching staff currently working in the centers, and compared this information to data about all teaching staff in 1994 and 1996. Teaching staff who were observed in 2000 (n=117) were comprised of new teachers in the observed classrooms as well as those observed and interviewed in 1994 and/or 1996 who were still employed at one of the 43 centers observed in 2000.

We also attempted to reach all of the teaching staff who had been observed in 1996 but who were not working at the centers we observed in 2000. Three groups of teaching staff were included in this category: 1) teachers who were working in the interviewed-only centers; 2) teachers who were no longer working in the center where they had been employed in 1996; and 3) teachers whose 1996 center either had closed or declined to participate in the 2000 study.

We successfully reached 57 percent of the teaching staff observed in 1996 (n=149). There were no differences between 1996 observed teaching staff that we were able to locate and those we could not find, with respect to their educational background, ethnicity, or partner/marital status in 1996. There were also no differences among the centers in which they worked with regard to staff or director stability and accreditation status.

Those we were unable to locate, however, were more likely to have worked in a for-profit center (32 percent versus 21 percent; χ^2 (1)=4.12, $p<.05$), and were earn-

ing lower wages in 1996 ($10.35 per hour) than those we located ($11.28 per hour; $t(255)=1.95$, $p<.05$).

TEACHER CHARACTERISTICS, 2000

Observed Teaching Staff Characteristics, 2000

One hundred and seventeen teaching staff were observed and interviewed in 2000, representing 16 percent of the teaching staff employed by the centers at that time. The observed group included eighty-three teachers (71 percent), twenty assistants (17 percent) and fourteen teacher-directors (12 percent). Thirty-six percent of staff had participated in the 1996 study (n=42).

This sub-sample of teaching staff were exceptionally experienced and well-educated (see Table 3.1 and description of the sample in the previous chapter). The majority of teaching staff had completed an associate's degree or higher. Forty-five percent had completed a bachelor's degree or higher. Fifty-eight percent participated in a supervised practicum experience as part of their formal training. Seventy percent reported they had received sufficient training for the job. Among those teachers who reported they hadn't received sufficient training, a variety of reasons were cited: "My director didn't follow up on the processing," or "I work at another job which limits my ability to take evening and weekend classes." For some it was a matter of logistics or economics. And for some, the reason was the staffing crisis: "I don't want to leave my classroom for a course or workshop because there's already a sub there everyday."

On average, teaching staff in this sub-sample had worked at their center for approximately six years and had been employed in the field of early care and education for almost 13 years. This group of observed teachers is somewhat different from the larger group of teaching staff described below because of the greater percentage of high-quality programs in the observed sub-sample in 2000.

Teaching staff wages were low, as detailed in Table 3.1. For an average work week of 35 hours, 52 weeks per year, the full-time equivalent salary for teachers in 2000 was $25,553. *Starting* public school teaching salaries are at least $6,000 a year more in most communities (American Federation of Teachers, 2000). The annual income required to reach self-sufficiency for a single adult with one preschool child in the communities of this study is $36,670 a year. (See Chapter 2 or the Glossary for the definition of self-sufficiency as used in this study.)

Nearly all of the teaching staff observed in 2000 were women (96 percent) in their forties with an average age of 42 years (see Table 3.2). Most were Caucasian (63 percent). The majority were married or living with a partner (61 percent), and on average, had one child. Approximately one-third spoke a language other than English fluently and use it to communicate with children in their classrooms. Their median household income ranged from $40,000-49,999 per year. Twenty two percent held a second job to supplement their child care income. Twenty-four percent of teaching staff, as opposed to 12 percent of center directors, had a history of receiving public support such as subsidized child care, food stamps or AFDC or TANF payments.

In addition to teaching staff at observed centers, we conducted phone interviews with staff who remained on the job at centers we were not able to visit. Interviews only were conducted with 26 teaching staff members who participated in 1996 and who were at the same center in 2000. Staff from interviewed-only centers did not differ from staff at observed centers with respect to gender, ethnicity, marital or partner status, educational background, experience in the field, average earnings, length of work week, or professional affiliation. Staff from interviewed-only centers were similar in age to those observed teachers who had also been on the job since 1996.

Table 3.1 Professional Characteristics of Observed Teaching Staff (N=117)	
Educational Background	• Majority (68 percent) completed a two year college degree or higher; • Almost half (45 percent) completed a bachelor's degree or higher; • 28 percent are pursuing a higher degree than they now hold
Early Childhood Training	• 58 percent participated in a supervised practicum; • 28 percent reported insufficient training for the job
Percent Belonging to Professional Organization	45 percent, most frequently NAEYC
Average Tenure in the Field	12.92 years; Range 0.33-34 years
Average Tenure at the Center	6.37 years; Range 0.08-23 years
Average Work Week	35 paid hours 3 unpaid hours
Wage Range	• Average wage for Teachers: $14.04 per hour; • Average wage for Assistants: $10.80 per hour; • Average wage for Teacher-Directors: $19.58 per hour; • Average wage for observed teaching staff: $14.01 per hour. • 89 percent of observed teaching staff earn less than $20 per hour; • 25 percent earn $11.18 or less per hour • 50 percent earn between $11.19 and $13.40 per hour

Table 3.2 Demographic Characteristics of Observed Teaching Staff (N=117)	
Gender	96 percent female
Average Age	42 years old; Range 21-72
Ethnicity	63 percent Caucasian 37 percent People of Color
Marital/Partner Status	61 percent married or partnered 39 percent single, divorced, widowed
Median Household Income	$40,000-$49,999
Hold Second Job	22 percent
Previous Recipient of Public Assistance	24 percent

What teachers love about their jobs...even when they leave them

The high rates of turnover among teaching staff mask the rewards of the job. Child care teaching staff derive a great deal of satisfaction from their work. Teachers in this study, like those described in others (Whitebook, Darrah, Friedman & Howes, 1978; Whitebook, Phillips, & Howes, 1990), most commonly cited "watching children grow and learn" as the most rewarding aspect of the job:

> "I love the wonderment of children's faces when they discover something."
>
> "When a child looks up, after days of working on something, and says 'I did it. I can write a letter,' it makes it all worthwhile."
>
> "Having shy children become relaxed and communicative with us and other children is priceless."

Teachers love the relationships they build and the feeling that they are "making a difference":

> "The kids–they love me and they show it! They look forward to seeing me everyday."
>
> "It is so rewarding when I help parents find resources, and six months later the parent is more relaxed and the child is doing better."
>
> "I like the camaraderie with co-workers. We're a well-oiled team–we can anticipate each other's needs."

The flip side of some of these rewards is also the source of stress for teachers, such as tense relationships with parents or co-workers, not feeling they can meet the needs of particular children, or difficult behavior on the part of children:

> "The children have a lot of psychological problems and I am not trained to deal with them."
>
> "I get frustrated when parents don't understand that sick children need to go home."

Low pay and lack of recognition for the job are a constant irritant. Many of those who leave child care work talk about the "great pay" in other fields. One former teacher, now working with animals, expressed delight because "we have no turnover of co-workers; we have stability."

On balance, however, teaching staff are strikingly positive about child care work. Only 14 percent of the observed teachers in 2000 would not recommend child care teaching outright, citing the low pay and status of the work. Positive recommendations about child care employment were also high among those who had left their 1996 jobs: Three-quarters (76 percent) of all contacted–84 percent of those remaining in child care jobs and 67 percent no longer in the field–recommended child care teaching as a career.

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All Teaching Staff Characteristics, 2000

From both observed and interviewed-only centers, we collected data on salaries, training and education for all teaching staff employed at the center. This provides a picture of the entire teaching workforce at 75 centers in 2000 including 435 teachers (66 percent), 182 assistants (28 percent), and 42 teacher-directors (6 percent).

The entire cohort of teaching staff were well-trained and well-educated. Thirty-seven percent of teaching staff held a bachelor's degree or higher with at least some early childhood training. These are somewhat higher levels of education than the most recent national data for teaching staff, which is nearly a decade old (Helburn, 1995). Wages were low and varied (see Table 3.3). On average, teachers earned $13.52 per hour–the full-time equivalent salary of $24,606. This translates to two-thirds of a self-sufficiency wage for an adult with a young child living in these communities. This amount is slightly more than half the average public school salary in California of $46,326, which is based on a ten-month year (American Federation of Teachers, 2000).

The full sample of teaching staff was similar to the observed group with respect to ethnicity. Approximately one-third of teachers (33 percent) and assistants (38 percent) were people of color. Teachers in the full sample were somewhat older than assistants however. One quarter of teachers were younger than 30 years old compared to 47 percent of assistants. The majority of teachers (53 percent) were between the ages of 30 and 40, compared to 41 percent of assistants.

FINDINGS

Goal One

To examine the extent to which centers undergo changes in teaching and administrative staff, and to identify factors associated with the stability and instability of personnel.

Finding 3.1

The teaching staff workforce is frighteningly unstable, even among this group of staff in relatively high-quality programs.

Three-quarters (76 percent) of all teaching staff employed in the centers in 1996, and eighty-two percent of those working in the programs in 1994, were no longer on the job in 2000. Between 1996 and 2000, assistant teachers were more likely to leave than all

Table 3.3 Professional Characteristics of All Teaching Staff (75 Centers; N=705 teaching staff)

Education and Early Childhood Training	• 37 percent of teaching staff had a bachelor's degree or higher and had completed at least some early childhood training
Wage Range	• Average wage for Teachers: $13.52 per hour; • Average wage for Assistants: $9.35 per hour; • Average wage for Teacher-Directors: $17.21 per hour; • Average wage for all teaching staff: $12.63 per hour • 50 percent of teachers and assistants earn less than $11.75 per hour; • 96 percent of teachers and assistants earn less than $20.00 per hour

other staff, and teachers were more likely to leave than teacher-directors ($\chi^2(2)=14.63$, $p<.001$; see Figure 3.1).

Seventy-four percent of teaching staff observed in 1996, and eighty-two percent of those seen in 1994, were no longer on the job at our 2000 visit. Among observed staff, there were no job title differences between 1996 and 2000, but assistants were most likely and teacher-directors least likely to leave between 1994 and 2000 ($\chi^2(2)=7.13$, $p<.05$).

Year-to-year turnover and the inability to replace staff also contribute to instability. For example, average turnover rates between 1999 and 2000 were thirty percent for all teaching staff. Although turnover data were not collected in each of the intervening years, it is probably reasonable to assume that similar rates of staff departures occurred between 1996 and 1997, 1997 and 1998, and 1998 and 1999. The range of turnover varied considerably among programs as shown in Figure 3.2. One-quarter of programs reported no turnover, and one-third reported more than 30 percent annually. Six centers reported 100 percent or more turnover of assistants, and nine reported 100 percent or more turnover of teachers in the previous year.

More than half of centers reporting turnover in the last year (56 percent) did not succeed at replacing all the staff they had lost. Seven percent of centers were unable to replace any teachers that had left, 26 percent were able to replace only half or fewer, and 23 percent replaced 51-99 percent of staff that left. NAEYC-accredited programs experienced the same rate of turnover as did other centers (see Chapter 6, Figure 6.1).

Finding 3.2

Despite recognition that higher wages contribute to staff stability, compensation for the majority of teaching staff positions has not kept pace with the cost of living. Centers appear to be targeting their investments to better-educated teaching staff and/or those performing administrative duties. Generally, there is little advancement for staff within centers.

Would you recommend child care as a career?

Current and former teaching staff were asked, "Would you recommend teaching in child care as a career?" Both groups of teachers gave similar responses, acknowledging the challenge and excitement of the work and the inadequacy of the pay, benefits and status:

"It's a difficult question to answer. If you love it, yes, but you need to know that you can't easily afford to meet your expenses."

"It depends upon what someone wants. If you are looking to do some good in the world, then yes, become a child care teacher. If you are out to make money then no."

"It's very enriching if you have the stamina."

"The societal respect and pay are too low. It's okay to start as a teacher, but not to stay."

"I would recommend it only as a second income. I wouldn't recommend it to a child of mine because you can't survive."

Wages for the majority of teaching staff positions, when adjusted for inflation, have decreased (six percent for teachers and two percent for assistants). (See Table 3.4.) The small number of teaching staff who remained on the job between 1996 and 2000 experienced only a two percent wage increase after adjusting for changes in the cost of living. There have been modest increases in real wages for teaching staff who also perform administrative functions (teacher-directors), although this group constitutes a small portion of the center-based workforce. Only 12 percent in 1996 and 9 percent in 2000 of teaching staff held these positions. Moreover, as a result of the low baseline salaries, even for these highest paid teacher-directors, the 11 percent increase amounts to a total of $2.10 per hour, in inflated dollars, over the course of four years

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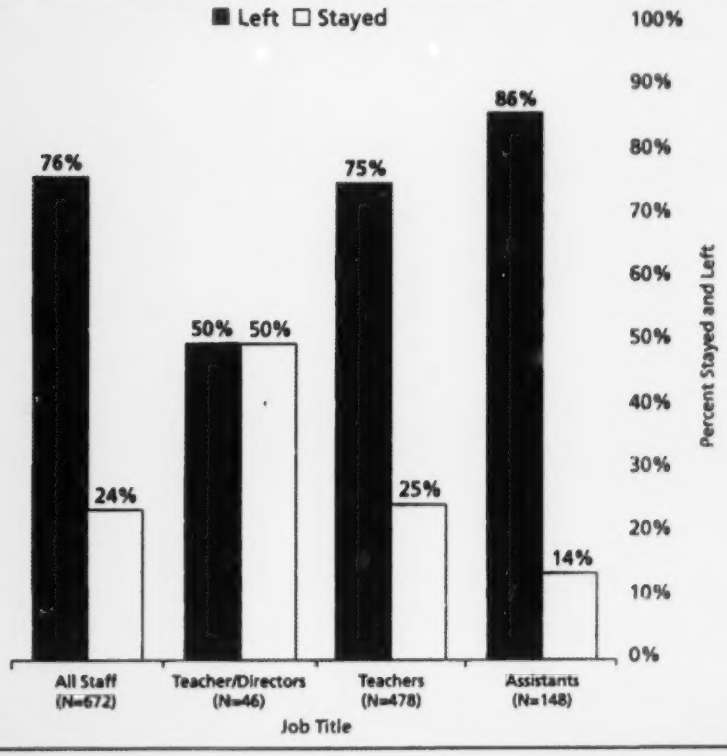

Figure 3.1 Turnover of All Teaching Staff, 1996-2000

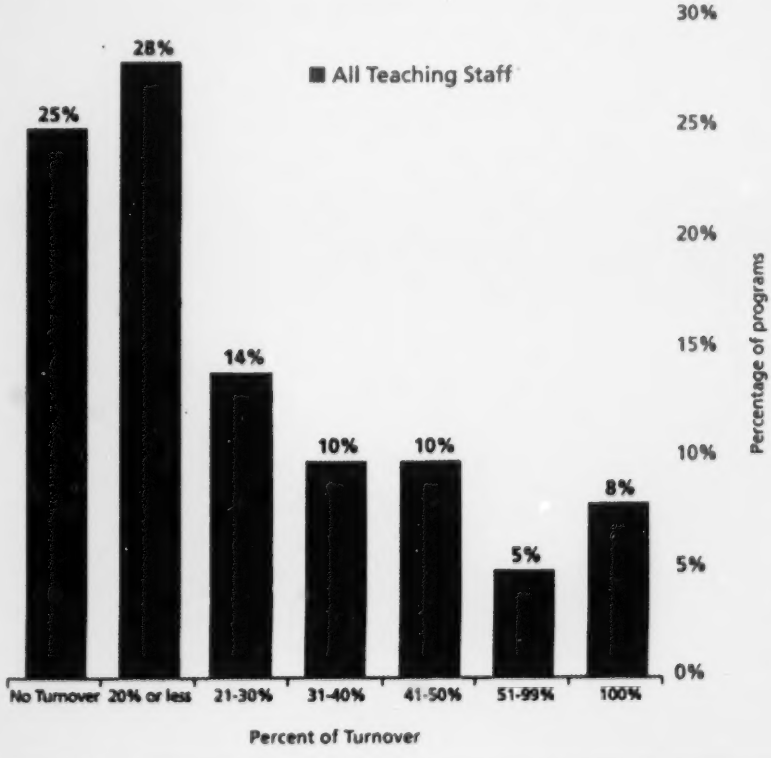

Figure 3.2 Percentage of Programs with Different Rates of Turnover, 1999-2000

Mean Turnover, 1999-2000:
All teaching staff=30 percent
All teachers=32 percent
All assistants=39 percent

or a little more than $.50 an hour more per year. Between 1992 and 1997, average wages for K-12 teachers in California increased by 9 percent (American Federation of Teachers, 2000).

Despite stagnating wages, 75 percent of observed teaching staff in 2000 reported their working conditions had improved since 1996, although these changes did not keep people from leaving. "We went from being great to greater all the time because we were always focused on ways to improve," stated a former teacher who is no longer working in the field. Only 20 percent of these teachers noted better wages among the improvements, perhaps explaining why the other changes were insufficient to retain more teaching staff.

To assess job mobility within programs, we examined the job titles of the 68 teaching staff interviewed and observed in 1996 that remained at their centers in 2000. Job title serves as the best proxy for advancement available from our data, though it is possible that new responsibilities were given to staff without a shift in job classification. Approximately two-thirds of all teaching staff (69 percent) retained their same job title between 1996 and 2000, although there was some variation by position. Eighty percent of teachers kept the same title, with the remainder split between those who became assistants and those who became teacher-directors or directors. Approximately half of the teacher-directors remained in a split administrative/teaching role, and the remainder were assigned strictly teaching or assistant job titles. Assistants were just as likely to advance to a teacher or teacher-director position as they were to stay in an assistant role.

Finding 3.3

Teaching staff reported that the staffing crisis negatively affected their ability to do their jobs, and for some this contributed to their decision to leave. Improving wages was recommended by the vast majority of teachers as essential to stemming turnover.

Teaching staff who left their jobs were asked their recommendations for reducing turnover at that former centers. Three-quarters suggested improving wages and benefits. When asked what they would recommend to reduce turnover in the field at large, 88 percent recommended improved pay to stem turnover.

Three-fifths (61 percent) of those working in the

Table 3.4 Trends in Hourly Wages for Observed Teaching Staff

Staff Position	1996 Wage	2000 Wage	Real Change Between 1996 and 2000
Teachers	$14.95	$14.04	6 percent or $.91 per hour decrease
Assistants	$11.04	$10.80	2 percent or $.24 per hour decrease
Teacher-Directors	$17.48	$19.58	11 percent or $2.10 per hour increase
All Teaching Staff	$14.56	$14.01	4 percent $.55 per hour decrease

Note: All wages, and the 1996-2000 trends, are in 2000 dollars.
Each category reflects average wages for the position.

What Teachers Say About the Effects of Turnover

"It's hard to get things done. My work hours are increased to make up for vacancies. Staff:child ratios are higher. Diapering can't be done effectively. Set-up for lunch and nap are impossible. I feel more stressed and fatigued."

"Children don't get what they need. They get insecure when a teacher leaves. There is a period of grief. It's hard for the new person because the children go through a period of testing, in part because they miss their old teacher. Eventually it settles down."

"I worry about who will be coming to be with the children. When I am taking time to train the new teacher, I don't spend as much time, or the kind of time, I want to with the kids. Sometimes the director divides the kids up from the classroom where the teacher left, so I have more kids in my class. Last time they were younger than the children I am used to working with."

"It's hard because I am new to child care so it is very stressful working with subs–I need some direction–I'm not ready to give it."

"You see people who work so hard and get trained and take so many classes. Then they burn out and leave. It makes me think about leaving myself and finding another job that pays more."

"I am new but when I see people leave I begin to think about my other options more too."

"Turnover makes me think: What am I doing here? Am I in the right field? Maybe I should do something else."

"It hits your morale hard. It makes me questions my decision to stay in the field. It makes me ask what's wrong with me."

observed centers at the time of our 2000 visit said that turnover created more work for them, and another fifth spoke of problems with staff:child ratios and substitutes. One fifth reported difficulty for the children. Teaching staff who had left their 1996 centers, whether they were working in different programs or were no longer employed in child care, as well as teachers working in their same jobs that we interviewed by phone expressed similar views.

Goal Two

To identify differences in professional preparation and family characteristics among teaching and administrative staff who stay at, leave, and enter centers over time, and to determine the extent to which those who leave centers remain in the field.

Finding 3.4

New teaching staff as a whole were significantly less well-educated than those they replaced.

Among all teaching staff, newcomers had completed less years of education and formal early childhood training than those they replaced ($t(966)=4.29$, $p<.001$). This was not the case for observed teaching staff, perhaps because a higher proportion had stayed on the job. Given the well-established relationship between the quality of care and the education and training of teachers as documented in previous research and in this study (see Chapter 5), the decline in educational background for teaching staff is particularly troubling. Teachers were asked to comment on the skills of their current colleagues in comparison to their previous coworkers. One said, "I have been through so many teachers, it is hard to tell the difference." Many lamented that "some have no early childhood credits so they are less knowledgeable," but they appreciated the "energy and enthusiasm" new teachers brought to the job.

Finding 3.5

The professional preparation of those who left and those who stayed was similar, although those who left had less tenure in the field at the time of their departure.

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Teaching staff who left the program were no less educated than those who remained at their centers (see Table 3.5 and Table 3.6). This was true for all teaching staff and for the observed sub-sample of teaching staff. Observed teachers who remained at centers were also remarkably similar to observed teachers who had left, with respect to professional affiliation, and whether they had completed a practicum in early childhood education. Observed teachers who left had less experience in the field ($t(143)=2.78$, $p<.01$) and in the center as of 1996 than those who remained ($t(124)=3.19$, $p<.01$), in part a reflection of their younger age. Leavers did not differ from their replacements with respect to tenure in the field.

Finding 3.6

The demographic profiles of teaching staff who stayed on the job and those who left are remarkably similar, while more differences exist between those who left and their replacements. Notably, new teachers were less likely to live in households that met the self-sufficiency standard for their community.

Observed teaching staff who left their jobs were younger on average (42 years old) than those who stayed (47 years old; $t(110)=2.71$, $p<.01$). With respect to gender, ethnicity, living with a partner or spouse, and household income, there were no differences between these two groups of teaching staff (see Table 3.7).

Observed teaching staff hired after 1996 were younger (38 years old on average; $t(153)=-2.05$, $p<.05$) and marginally less likely to be married or living with a partner than those they had replaced ($p=.06$). There was a trend for more observed new teachers to be people of color (43%) than those who left (29%) and those who stayed (32%).

New teachers lived in households with significantly lower annual earnings than their predecessors. The median household income for observed new teachers was $30,000-$39,000 per year compared to $50,000-$59,000 per year for those who left ($t(147)=-2.85$, $p<.01$). In 2000, 87 percent of teachers who had been on the job since 1996 lived in households which met or exceeded the self-sufficiency wage for a family of their size in their county. Significantly fewer new teachers (68 percent) met this standard ($\chi^2(1)=5.47$, $p<.05$). The lower household incomes of new staff may reflect their younger age. Nonetheless, their income underscores the challenges of living solely on a child care income, and does not bode well for their longevity in the field. With respect to history of

Table 3.5 Professional Characteristics for All Teaching Staff: Leavers, Stayers, and Newcomers (N=75 centers)

	All Teaching Staff, 1996 No Longer at the Centers in 2000 LEAVERS	All Teaching Staff, 1996 Currently Employed at centers in 2000 STAYERS	All New Teaching Staff, Employed at centers in 2000 NEWCOMERS
Educational Background	46 percent with at least a BA degree	51 percent with at least a BA degree	36 percent with at least a BA degree
Average Wage, 1996	$13.11 per hour	$15.76 per hour	---
Average Current Wage	---	$15.69 per hour	$11.71 per hour

Table 3.6 Professional Characteristics For Observed Teaching Staff: Leavers, Stayers and Newcomers

	1996 Observed Teaching Staff No Longer at the interviewed-only or observed centers in 2000 LEAVERS (n=81)	1996 Observed Teaching Staff Currently at the either interviewed-only or observed centers in 2000 STAYERS (n=68)	2000 New Observed Teaching Staff at observed centers in 2000 NEWCOMERS (n=75)
Educational Background	52 percent with at least a BA degree	42 percent with at least a BA degree	49 percent with at least a BA degree
Early Childhood Training	65 percent completed a practicum	59 percent completed a practicum	55 percent completed a practicum
Average Tenure in the Field, 1996	8.82 years	11.5 years	---
Average Tenure in the Field, 2000	---	15.4 years	10.4 years
Average Tenure at the Center, 1996	3.44 years	5.77 years	---
Professional Affiliation, 1996	44 percent	44 percent	---
Professional Affiliation, 2000	---	54 percent	39 percent
Health Benefits through job	48 percent	49 percent	49 percent
Pension Benefits, 1996	40 percent received pension benefits	55 percent received pension benefits	---
Pension Benefits, 2000	40 percent received pension benefits	65 percent received pension benefits	62 percent received pension benefits
Average Wage, 1996	$10.25	$12.43	---
Average Current Wage	$15.76 Continue to work in child care $14.24 Left field $18.40	$16.00	$12.39

New teachers are more likely to receive pension benefits than staff who left the program ($\chi^2(1)=7.21$, $p<.01$).
New teachers currently earn less than those who left the program ($t(81)=-3.56$, $p<.001$).
Leavers and stayers earn about the same now, but in 1996 stayers earned more ($t(116)=3.88$, $p<.0001$).
Those who left the field earned significantly more in 2000 than those who stayed ($t(28)=-2.07$, $p<.05$).

Table 3.7 Demographic Characteristics of Observed Teachers: Leavers, Stayers and Newcomers

	1996 Observed Teaching Staff No Longer at the Center in 2000 LEAVERS	1996 Observed Teaching Staff Currently at the interviewed-only or observed centers in 2000 STAYERS	2000 Observed Teaching Staff at observed centers in 2000 NEWCOMERS
Gender	97 percent	93 percent	99 percent
Ethnicity			
Caucasian	71 percent	32 percent	57 percent
People of Color	29 percent	68 percent	43 percent
Average Age in 2000	42	47	38
Living with partner or married in 2000	70 percent	71 percent	56 percent
Median Household Income Range	$50-59,000 per year	$50-59,000 per year	$30-39,000 per year
Percent Meeting Self-sufficiency for Family Size, 1996	71 percent	68 percent	---
Percent Meeting Self-sufficiency for Family Size, 2000	---	87 percent	68 percent
Hold Second Job, 1996	24 percent	22 percent	---
Hold Second Job, 2000	---	24 percent	21 percent
Previous or Current Recipient of Public Assistance	17 percent	24 percent	23 percent
Communicate in an Additional Language To English	19 percent	24 percent	---
Fluent in Additional Language Besides English	24 percent	41 percent	---
Speaks to children in Language Other than English	---	33 percent	27 percent
Speaks to Parents in Language Other than English	---	12 percent	28 percent

Teachers talk about leaving their jobs

Teaching staff gave numerous reasons for leaving their jobs.

- As would be expected, many left for better pay and benefits:

  "I decided to stay at home with my two children; all my salary went to child care bills."

  "Health benefits were promised when I was hired; I left a year later without them."

  "Teachers leave because they aren't paid enough. That's why I left too. My current job is not as emotionally or psychologically satisfying as teaching, but it is satisfying enough and the money is much better."

- Some left seeking better work relationships:

  "The director refused to fire someone that should have been fired, so I left."

  "New management took over the center and I didn't like the changes made. It was a big company that didn't include teachers in the decision-making process."

- The stress of co-workers' and director departures also contributed to teachers' decisions:

  "We went through four different directors. It was too much. It's difficult working with so many different people and getting to know them when they end up leaving."

  "We had complete turnover of staff in two years–chaos!"

  "I was extremely stressed. The first warm body would be hired. Often new teachers were immature, had serious problems or no early childhood training. It was not easy to get along with them."

receiving public assistance or whether they currently held a second job, new teachers did not differ from those they replaced or their colleagues who were currently employed at the centers.

In 1996 we asked teachers to tell us the languages they used to communicate with the children in their class and whether they were fluent in those languages. This allowed us to distinguish between staff who knew a few words or key phrases used to communicate with children in their home language and staff who were truly bilingual. In 2000 we asked similar questions: "In which languages do you speak to children in your class?" and "In which languages do you communicate with parents of children in your class?" We assumed that communicating with parents would require a more thorough knowledge of the language families spoke at home than would speaking with the children. As shown in Table 3.7, new teachers were somewhat more fluent in languages other than English than veteran teachers, but the majority of children who spoke languages other than English (as described in Chapter 2) did not have a teacher in the classroom with whom they could communicate in their home language or who could speak with their parents in their home language.

Finding 3.7

When teaching staff leave their centers, only half continue to work in child care.

Fifty-one percent of former teaching staff (41 of 81) were still working in settings associated with young children when we contacted them in 2000. Of these, 83 percent were teachers in other early care and education programs, and 10 percent had established their own family child care businesses or were working as nannies. The remaining seven percent were working in child-related agencies or as a director. One-third of former teachers accepting jobs in new centers had worked at centers that closed between 1996 and 2000 (see Table 3.8).

Many programs throughout California lament the loss of teaching staff to elementary school jobs. Seven

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Table 3.8 Where Teachers Go	
Teacher, different child care center	42 percent
Non-child related	21 percent
Not currently employed, home with children	15 percent
Elementary school teacher	7 percent
Family child care	4 percent
Attend school full time	4 percent
Other child care agency, such as a resource and referral	2.5 percent
Retired	2.5 percent
Nanny	1 percent
Director, different center	1 percent

percent of the former teaching staff we contacted were currently working in this capacity, but we do not know if the former teachers that we could not locate made different career choices than those that we were able to contact. Given the high proportion of former teachers with bachelor's degrees, it is quite possible that some sought employment in elementary schools. As described in Chapter 4, current directors report that many teachers had left their programs in the last year for K-12 teaching jobs. The former teachers who were currently working in elementary schools reported that their previous jobs were helpful to them in their current positions. One teacher expressed the views of others when she said, "Many of the children never went to preschool, and I know how to help children with social and life skills in their first school setting."

As stated earlier, former teaching staff identified wages as a culprit in turnover. But they identified other attractive features of their new jobs in addition to pay. Among those working in elementary schools, they were pleased to have been recruited, and found the autonomy and shorter hours appealing. Teachers no longer in the child care field were found working in a wide variety of occupations including high tech industries, retail, and other human services. Several had started their own businesses. Some wanted to be their own boss. Others sought better pay and benefits. On average, those working in non-child care-related industries earned significantly higher wages ($18.40 per hour) than those who accepted new child care jobs ($14.24 per hour; $t(28)=-2.07$, $p<.05$). Some made their choices because of family considerations or because they "fell into a good situation."

Almost a third of those who left their centers to work in a different child care program did so because their original program had closed. Others said they would not have made the change if they had been paid more, or if they had received more support from the administration in the form of a promotion, more autonomy, or more input into decision making at their previous center. On average, these teachers were not earning more than their colleagues who had remained at the centers. Only those who left the field were earning significantly more per hour.

Teachers continuing to work in child care were asked whether they planned to remain in child care and if so, why or why not. Of those working at observed centers, 60 percent plan to remain. When asked why, they most frequently mentioned the children and their enjoyment and belief in the work. Only two teachers said they would stay because they didn't feel they had other options. Forty percent plan to leave, citing reasons such as needing more money, desiring a change, wanting to advance in their careers, and retirement or family issues. For those with college degrees, several mentioned a desire to become an elementary school teacher.

SUMMARY

The pervasive instability among teaching staff in center-based programs shows little sign of abatement. Even in this sample of high-quality programs, teachers are leaving at an alarming rate. Their exit is more a reflection of dissatisfaction with their compensation and status than with the work of caring for young children, which most find challenging and compelling.

Teachers overwhelmingly recommend improved compensation as the most important vehicle for stabilizing the workforce; wages are not keeping pace with inflation for the majority of teaching staff. It is little surprise, but nonetheless disturbing, that regardless of high levels of investment in their education and training, many are leaving child care employment for better paying jobs. Only half of the teaching staff who left continue to work in settings for young children. Equally, if not more troubling, is the fact that their replacements are not as well-educated or well-trained for work with young children. The new staff are also more economically vulnerable, which underscores the challenge they face living on stagnating and low wages. On a positive note, the current and former teaching staff remain enthusiastic about working with preschool children. This suggests that investments in improving the pay and working conditions of teachers would yield a great return: programs could more easily recruit and retain qualified and committed employees.

FINDINGS: Current and Former Directors

This chapter provides a description of the director workforce in 2000, examines the extent to which centers have undergone changes in administrative staff in recent years, and identifies differences in the characteristics of directors who stay at, leave, and enter centers over time.

OVERVIEW

Policymakers and researchers have focused attention on the significant role center directors play in building and sustaining high quality child care programs (Cost, Quality and Child Outcome Study Team, 1995; Bloom, 1996a, 1996b; Whitebook, et al., 1997). According to the *Cost, Quality and Child Outcome Study* (Helburn, 1995), higher quality programs employed directors with more years of formal early childhood training, more prior experience in early childhood education programs and longer tenure at their centers. In higher quality programs, directors received higher ratings from their staff for their organizational and leadership skills, knowledge of curriculum, and community involvement and participation. Bloom and others have explored how director training contributes to higher quality, and a number of training and credential initiatives for directors have been developed in recent years (Center for Career Development, 2000).

In the earlier phase of this study, we also identified the critical role that directors play in teacher retention: teaching staff were more likely to remain at their jobs between 1994 and 1996 if the director also stayed (Whitebook, et al., 1997). Findings such as these from the research literature, coupled with anecdotal reports of a growing staffing crisis among directors, led us to focus attention on director stability and challenges to the administrative workforce over time. This investigation stands as one of the first longitudinal studies of center directors.

Our investigation focused on three groups of directors from the centers in our sample:

- those employed at the centers in 1996 and 2000 (n=45)
- those employed at the centers in 1996 but no longer at the centers in 2000 (n=26)
- those new to the centers since 1996 (n=30)

Thus, we were able to explore differences between those directors who stayed and those that left, and compare the 1996 and 2000 director workforce. We also sought to understand the interplay between director characteristics and program quality, exploring how high-quality programs contribute to director stability and how, in turn, directors' skills, experience and continuity influence program quality. We remind our readers that our sample includes many centers that were NAEYC-accredited and/or rated high in quality. Our findings, therefore, may not be representative of administrators in other communities or among centers representing a greater range in quality.

METHODOLOGY

We interviewed the director at each participating center in 2000, and identified directors who had stayed on the job between 1996 and 2000 as well as those who were new to the program. We also attempted to reach all of the directors who had been on the job in 1996 but who were no longer employed at the center in 2000 and those whose centers were either closed by 2000 or declined to participate in the study. We suc-

cessfully reached approximately two-thirds of the directors who had left their jobs (63 percent), and those from the closed and refused centers (69 percent). There were no differences between former directors we were able to locate and those we did not find with respect to marital status, education and early childhood training, wages, staff turnover at center, or center quality in 1996.

DIRECTOR CHARACTERISTICS, 2000

The seventy-five directors we interviewed in 2000 were well-educated and well-trained in early childhood education (see Table 4.1). Approximately three-quarters of the directors (77 percent) had completed a four-year degree, and approximately half (49 percent) had post-baccalaureate coursework or degrees in early childhood education. Seventy-one percent had participated in a supervised practicum to prepare for work with young children. On average, directors had worked at their centers slightly more than eight years, and had been employed in the field of early care and education for approximately 18 years. Over 90 percent had previously worked as a child care teacher, on average for more than ten years.

While better paid than teaching staff, considering their impressive experience and training, directors' wages are notably low: on average, directors earned $20.07 an hour, with 54 percent of directors earning under $20 an hour, and 99 percent earning under $34 per hour. With an average work week of 36 hours, 52 weeks per year, the full-time equivalent salary for directors in 2000 was $37,571. The recommended statewide *starting* salary for elementary school teachers in California is $38,000 for a nine-month year.

Three-quarters of the directors reported they had received sufficient overall training for the job. Nearly half of the directors believed that additional training in the areas of staff relations (44 percent), personnel management (45 percent), financial oversight (48 percent), and technology (43 percent) would help them in their jobs. Seventy-nine percent were members of a professional organization, with NAEYC the common group to which they belonged.

Directors seek more training

Directors who reported they needed more training worked in centers with marginally lower ECERS scores, although this difference was not significant ($p<.08$). These directors expressed dissatisfaction with the training that they had received:

"There was no real training for the problems that I face on a weekly and daily basis. It's crash and burn."

"I would have liked to have had job shadowing and specific problem solving techniques relevant to the problems at my center."

"I am trained to work with parents and children, but no one prepared me for working with underpaid and inadequately trained staff."

Nearly all of the directors employed in 2000 were women (92 percent) in their forties with an average age of 47 years (see Table 4.2). The vast majority (83 percent) were Caucasian. Nearly-two thirds (65 percent) were married or living with a partner; their median household income ranged between $65,000 and $85,000 per year. Only 12 percent held a second job to supplement their income, and only 12 percent had a history of receiving public support, such as subsidized child care, food stamps, or AFDC or TANF payments. Compared to teaching staff, directors were more likely to be Caucasian, older, and less likely to hold a second job.

FINDINGS

Goal One

To examine the extent to which centers undergo changes in teaching and administrative staff over time, and to identify factors associated with stability and instability of personnel.

Table 4.1 Professional Characteristics of Directors, 2000. All Current Directors (n=75).	
Educational Background	Majority (77 percent) had completed a bachelor's degree or higher; 24 percent were pursuing a higher degree than they currently held
Early Childhood Training	71 percent participated in a supervised teaching practicum; 24 percent reported insufficient training for their job
Average Tenure in the Field	18 years; Range 4-40 years
Average Tenure at the Center	8 years; Range 0.2-34 years
Percent With Previous Experience as a Director	30 percent
Percent With Previous Experience as a Teacher	90 percent, average 11 years
Average Work Week	36 paid hours 7 unpaid hours
Wage Range	Average wage $20.07 per hour 54 percent earn less than $20 per hour; 99 percent earn less than $34 per hour
Percent Belonging to Professional Organization	79 percent, most frequently NAEYC

Finding 4.1

Director turnover is alarmingly high.

Forty percent (30 of 75) of the centers participating in 1996 had a new director in 2000, and two-thirds of these centers (n=20) reported having two or more directors in the last four years. Between 1994 and 2000, 51 percent (38 of 75) of the centers had new directors. Although the rate of director turnover is nearly half that of teaching staff during the same period, this finding underscores the pervasive instability among all sectors of the center-based workforce.

Table 4.2 Demographic Characteristics of Directors, 2000. All Current Directors (n=75).	
Gender	92 percent female
Average Age	47 years old; Range 24-77
Ethnicity	83 percent Caucasian 17 percent People of Color
Marital/Partner Status	65 percent married or partnered
Median Household Income	$65,000- $85,000
Hold Second Job	12 percent
Previous Recipient of Public Assistance	12 percent*

*Those who had previously received public supports were significantly more likely to hold second jobs.($\chi^2(1)=4.19$, $p<.04$).

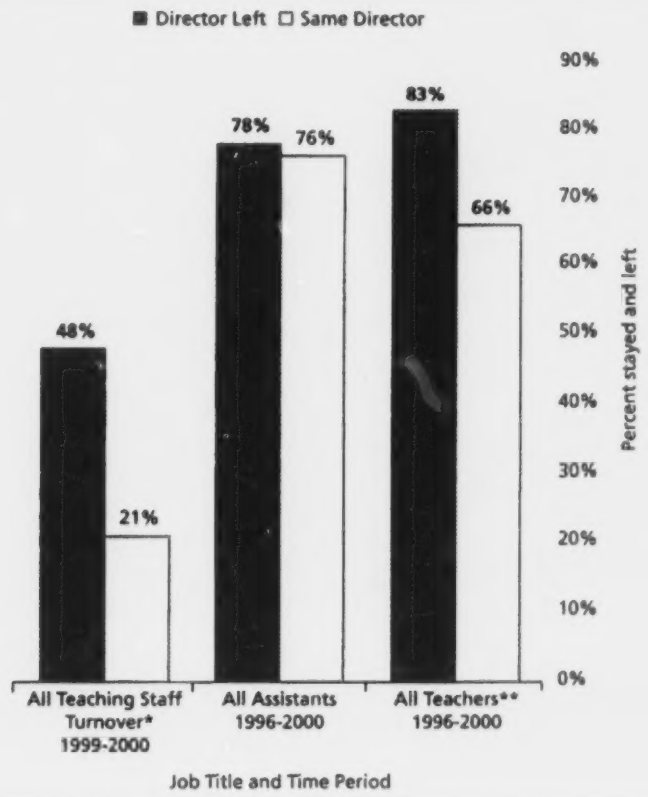

Figure 4.1 Staff Stability in Centers Where Director Stayed or Left

* $t(73) = -2.68$ $p < .009$
** $t(34) = -2.20$ $p < .03$

Finding 4.2

Director stability contributes to teacher stability.

Centers that lost directors also had higher rates of teacher turnover. As shown in Figure 4.1 turnover rates for assistants were not significantly different in centers that lost or retained their directors.

Finding 4.3

The staffing crisis negatively affects directors' job satisfaction as well as their ability to do their jobs.

While nearly two-thirds of the directors expect to remain in child care work for at least three more years, nearly half (43 percent) of directors employed at the centers in 2000 reported that turnover has negatively affected their own career goals. Only 21 percent said they would take a job in another child care center. Eighty-five percent reported their abilities to do their jobs were negatively affected when staff left their centers, and 78 percent said staff turnover negatively affected the overall organization of their programs.

California implemented a policy in 1996 to reduce the size of Kindergarten through third grade classes. This created many new job opportunities in the public schools for teachers and directors with bachelor's degrees. Only seven percent of the pool of 1996 observed teachers who left their centers had taken jobs as K-3 teachers. However, when the full pool of teaching staff at centers who are eligible for teaching jobs is considered, the impact of class size reduction appears greater: thirty-six percent of directors reported one or more teachers leaving their center for a K-3 job in the last year alone.

Seventy-nine percent of directors expressed moderate to extreme dissatisfaction with the skills and training of the available pool of substitute workers. Representative remarks included:

"I can't find as many substitutes as I need. It is hard working with a young staff...they have a different work ethic than those from 10 years ago."

"There is a lack of natural instincts and abilities on the part of many substitutes and new teachers for working with children."

"The education level of applicants is getting lower. It's very hard to find qualified substitutes or teachers."

What directors say about the effects of staff turnover

Directors spoke candidly about how losing staff affected their ability to do their jobs, and the impact of turnover on the overall organization of their programs. Almost every director mentioned coverage problems arising from staff turnover, requiring them to be in the classroom, and preventing them from attending to other administrative duties.

Directors working in programs that sustained a high level of quality over the last four years expressed frustration equal to those from programs rated lower in quality:

"I spend all day in the classroom with one hour per day maximum for administrative tasks. It means I stay late."

"I am always on the phone trying to find subs. It takes me away from the program."

"I am constantly searching for new staff and watching for negative changes in the program."

Directors paint a bleak picture of coping with staff instability. Additional work created by training and orienting new staff, deteriorating staff working conditions and relationships, and a threat to quality were among the problems described:

"Two people end up doing one person's job because substitutes need to be shadowed. At times we have had a different person every week. The supervision of substitutes also means there is less time for the children."

"We try to work as a team, but the teams feel incomplete or have to undergo a big adjustment when there are new members."

"There are more children per teacher, less personal time, more overtime."

"We end up focusing on how to get through today rather than lesson planning."

"Things get very tight. I can't let teachers take time off for vacations and bad feelings arise among staff."

"There is no time to give to teachers and what they need is a sense of community."

"It is very unorganized, children are moved from room to room. It leads to inconsistent care for the children, and that is hard on them, their parents and the staff."

"When we aren't fully staffed, we can't give the same level of service."

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Why directors leave and where they go

Directors–like many people–leave jobs for a variety of reasons. Often they are personal. As might be expected, however, given the high levels of turnover and the shortage of trained staff, the challenges of running a program under these circumstances play a part in directors' decisions to step down and perhaps leave the field altogether:

> "I felt very stressed by being in crisis mode all the time. I was not able to find quality staff. I had no substitutes to call on, and so I could never take time off. I routinely worked 12 hours a day! I didn't feel like I was doing a good job."

> "I was extremely burned out. We had several crises and as a nonprofit we were always struggling financially. I felt the stress of constantly trying to find good people."

> "You need to be tough. You need to be able to cope with staff turnover because your staff is everything. And if you can't get good staff you can't feel good about your job."

Former directors were asked, "What, if any, changes could have been made in your previous child care jobs that could have changed your decision to leave?" Many were happy at their jobs but just needed to leave because of family or health considerations.

Several reported better pay or funding would have made a difference. More support from an immediate supervisor or parents was also mentioned. The enormity of the job seemed to stymie many directors: "If it hadn't been a seven day a week job..." And, for a few, the desire to work directly with children, rather than as an administrator, was something that could not really be changed: "I just missed being with kids."

Interestingly, many of the directors who left their centers mentioned that working conditions had actually improved during their tenure. But sometimes the improvements were not sufficient, and directors reported that it was if they were swimming upstream:

> "Even though we got regular benefit and pay increases, we still had less buying power factoring in the high cost of living in this area. The salaries in child care are at the low end. I am making the same salary now as an office manager that I made as a director with 18 years of experience."

Some reported that things had just not improved:

> "The morale of the staff went down because there were more untrained teachers and that resulted in conflict between those with more and less training."

Those no longer working as directors were asked under what circumstances they might return to child care work. The administrative challenges and the pay function as deterrents, but several directors remain interested in working with young children.

Many of the directors were no longer working either because they had retired or were staying home with children. Some who were working chose their new jobs intentionally, seeking a promotion or a challenge. Others just seemed to fall into a new opportunity:

> "It was a fluke–I went with a friend to a meeting about careers in real estate, and I liked it."

> "At first I was looking for something to fit in with my class schedule. So I worked as a temporary office assistant. It was convenient. I just stayed."

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Why directors stay, and what they see ahead for themselves

Directors who remained on the job between 1996-2000 were asked why they had stayed:

- Gratification derived from the work itself:

  "I like what I do. This (the center) is my family and I love getting to know families and helping them."

- Enjoyment of the control and respect that accompanies a leadership position:

  "I like being an expert for the parents."

  "I am a celebrity in my community; I get great attention at the grocery store."

  "I love just walking through the door in the morning. The children are always so happy to see me."

- A good fit between work and family life:

  "I could work part time when my children were little and I like to be my own boss."

- For a very few, the compensation was a plus.

Current directors were also asked how long they expected to remain in the field and why they chose a particular time frame. For those who saw themselves staying for many years or until retirement, it was common to talk about the nature of the work and their own identity as a director: "This is my calling."

But one director said she would stay "until I die in circle time reading to the children because I have no retirement benefits after years in this field and I need to work!"

Current directors were asked what they would be most likely to do if they left their centers. Several hoped to retire or teach at the college level. A number wanted to remain in early childhood but in a different capacity, such as working in a resource and referral agency, becoming an educational consultant, parent educator, or advocate.

Would you recommend a career as a child care director?

Current and former directors were asked "Would you recommend child care administration as a career?" Both groups of directors gave similar responses, with former directors being slightly more enthusiastic in their recommendations. Overall, about two-fifths of directors wholeheartedly endorsed becoming a center director citing the challenging, ever-changing quality of the work, plus the rewards of working with children and families:

"Directing requires a diverse set of skills. Life is never dull. Every day is a challenge."

"It's very satisfying. I had lots of independence. The job enabled me to make a positive contribution to the community."

Most directors, however, were ambivalent about the job, warning that it was not for the faint of heart or for those without other financial resources in their household:

"It's the right job for some people. They need to be patient, hardworking and flexible, willing to do whatever to get the job done, because turnover is so high, salaries are low and parents and children are demanding."

Those who could not recommend child care directing as a career spoke of stress and low pay as major reasons:

"I wouldn't recommend it until our society is more respectful and appreciative of the work we do. It is not worth the stress. I wouldn't recommend it unless you are independently wealthy."

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Goal Two

To identify differences in professional preparation and family characteristics among teaching and administrative staff who stay at, leave, and enter centers over time, and to determine the extent to which those who leave centers remain in the field.

Finding 4.4

With respect to education levels, new teaching staff overall were significantly less-well educated than those they replaced. However, new directors were no different than directors who stayed on their jobs, or those that had replaced directors who left.

With respect to professional background, including education, early childhood training, tenure in the field or in the program, and affiliation with a professional organization, all directors were remarkably similar. As would be expected because of their shorter tenure, newly hired directors earned significantly less ($18.23) than directors who had been on the job since 1996 or earlier ($21.31; $t(70)=1.96$, $p< .05$).

Finding 4.5

The demographic profile of directors who stayed at, left and recently entered their programs is remarkably similar.

There were no significant differences between directors who left and those that stayed with respect to demographic characteristics such as age, gender, marital or partner status, median household income, or history of receiving public support. However, directors who left their programs were more likely to be people of color than those that remained ($\chi^2(1)=5.68$, $p<.05$). Replacement directors were also more likely to be people of color ($\chi^2(1)=8.93$, $p<.01$). As might be expected, new directors were significantly younger than were former directors ($t(71)=2.88$, $p<.01$).

Finding 4.6

When directors leave their centers, half leave the field of early care and education.

Thirty-nine percent of those who left accepted positions as directors or assistant directors at different programs, and 11 percent were employed in child care agencies, such as a resource and referral agency or as a teacher in another center. The remaining were either retired or deceased (18 percent), staying at home with children (18 percent), or employed in non-child care related fields (14 percent).

SUMMARY

The staffing crisis is not confined to teaching staff. Directors are also leaving their jobs and the field at a disturbing rate, fueled, at least in part by low wages. While programs appear to be attracting well-qualified replacements for directors who leave, many well-qualified administrators are also leaving the field of early childhood education. Turnover of teaching staff appears to contribute to directors' departures from programs and the profession, by making the already challenging job of directing a program for young children even more so.

FINDINGS: Retaining Skilled Staff

CHAPTER 5

This chapter identifies the characteristics of child care centers associated with the retention of skilled teaching staff. It also identifies the workplace and individual characteristics that distinguish teaching staff of different skill and educational levels that stay at or leave their jobs.

OVERVIEW

Between 1994 and 1996, we found that highly-skilled teachers were more likely to leave their jobs if they earned lower wages, worked in a climate with less stability of highly-trained co-workers, experienced a change in director, and/or worked with a greater percentage of teaching staff with low backgrounds. Low background is defined in this study as less than a bachelor's degree and limited specialized, college-level early childhood education training.

The finding that better wages significantly influenced whether teachers remained on the job is consistent with previous child care research (Helburn, 1995; Whitebook, et al., 1990). Our 1996 findings extended previous research by revealing that the characteristics and stability of the teaching staff as a whole–as well as the job commitment of the director–also influence whether highly-skilled teachers remain on the job. In centers where highly-skilled staff work with other highly-skilled teachers who remain on the job, they themselves are more likely to stay.

The absence of capable co-workers makes the already demanding job of creating a well-functioning environment for children even harder. Like any team process, it takes time and effort to establish the communication necessary between teachers to create and maintain a smoothly-operating classroom. When other teaching staff leave, particularly those with whom a teacher has worked closely, it deeply affects her day-to-day experience and ultimately, perhaps her decision to remain in her current position. The loss of the director–the person who is responsible for establishing and maintaining the tenor and structure of the work environment–may also understandably lead other employees to reconsider their own relationship to the job.

Recognition of the importance of formal education and training for those working with young children is widespread (Morgan, et. al., 1993). Over the last two decades, a variety of professional development programs have been initiated across the country with the goal of building a more highly-skilled early care and education workforce. While few studies have documented the efficacy of these programs (Cassidy, Pugh-House, & Buell, 1995; Whitebook & Sakai, 1995), the wealth of research demonstrating the relationship between caregiver training and program quality has led funders and policymakers to generously support professional preparation for child care teachers and providers (Azer & Hanrahan, 1998; Azer, Capraro & Elliott, 1996; Elliott & Vestal, 1998).

The absence of capable co-workers makes the already demanding job of creating a well-functioning environment for children even harder.

Despite many individuals pursuing child-related training, the staffing crisis continues. The goal of initiatives cannot simply be to train more people or to get any staff to remain on the job. To be judged as worthy of investment, training and education programs ideally should result in an expanded pool of *qualified* personnel to work in programs for young

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children over an *extended* period of time. In this chapter, we revisit the question of program and individual characteristics that lead to well-trained staff remaining on the job. In the following chapter, we examine the characteristics of programs that are able to sustain a high level of quality over time.

METHODOLOGY

As described in Chapter 2, we used analysis of variance and chi-squares to identify differences among programs with varying rates of staff stability. We also examined different individual and job characteristics that distinguish between four groups of observed teaching staff: highly-trained teachers who remained on the job, highly-trained teachers who left the job, low-trained teachers who stayed, and low-trained teachers who left. (These groupings comprise the positive staffing variable defined in Chapter 2.)

We tested a series of variables that have been associated in research with turnover and/or have been hypothesized to influence it. Specifically, we used a series of discriminant function analyses to determine whether wages, benefits, working conditions, and center characteristics, as well as individual professional and demographic characteristics, differentiated group membership. A similar analysis was performed in 1996 with over fifty variables (Whitebook, et. al, 1997). In 1996, wages, staff background and turnover climate were the only significant predictors identified from the series of discriminant function analyses.

In 2000 we selected those variables that we found to be significant discriminators in 1996. We also tested a few selected benefits (health coverage, reduced fee child care, and pension), working conditions (paid preparation time), and personal or professional characteristics (marital status, self-sufficiency, tenure in child care, held a second job, and membership in a professional organization) we hypothesized might influence group membership. The significant variables were then selected for another discriminant function analysis, the results of which are discussed later in this chapter.

FINDINGS

Goal One

To identify center characteristics associated with stability and instability of staff.

Finding 5.1

Centers paying higher wages are better able to retain qualified teachers.

Among all teachers who had completed a bachelor's or graduate degree and specialized early childhood training, there were significant wage differences between those who stayed ($18.68 per hour, SD=$5.86) and those who left ($15.39 per hour, SD=$6.15; $t(185)=3.16$, $p<.01$). This difference translates to over $6,000 per year for full-time employees. Even those at the highest level of pay and experience earn at least $10,000 less per year than the *average* California K-12 teacher with equivalent education and $6,000 less than *starting* teachers (American Federation of Teachers, 2001).

Regardless of education level, among all teachers working at the centers in 1996 those no longer on the job in 2000 earned significantly less per hour ($10.29) than those who remained on the job ($11.83; $t(196)=3.94$, $p<.001$). This difference translates to approximately $3,000 per year for full-time employees.

Wages for all assistant teachers and teacher-directors were not significantly different among those who left and those who stayed during this time period (see Figure 5.1). Among observed teaching staff working at the centers in 1996, those no longer on the job in 2000 across all job titles earned significantly less per hour than those who remained on the job ($t(208)=3.82$, $p<.001$).

Centers paying higher wages also had lower overall teaching staff turnover in the previous year. Among both observed teaching staff and all interviewed teaching staff employed by the programs, centers with no staff turnover paid significantly higher wages than centers with turnover, whether the turnover was moderate or high (see Figure 5.2).

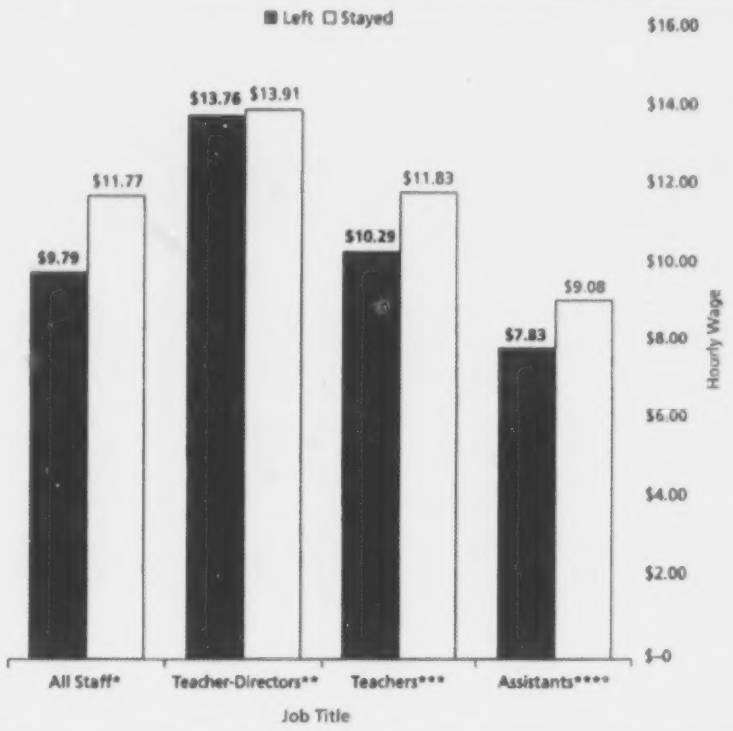

Figure 5.1 Wages in 1996 for All Teaching Staff Who Stayed and Staff Who Left by 2000

* All staff stayed n=159, left n=484, $t(246)=5.82$, $p<.001$
** Teacher-directors stayed n=22, left n=21, $p=.88$
*** Teachers stayed n=117, left n=336, $t(196)=3.94$, $p<.001$
**** Assistants stayed n=20, left n=127, $p=.13$

Finding 5.2

Centers that pay higher wages to directors, as well as to teaching staff, are better able to retain both groups of workers. Centers that lost their directors were more likely to employ teaching staff who were harsh in their interactions with children.

Even though their qualifications were similar, directors who were no longer on the job in 2000 earned on average significantly less per hour ($14.47) in 1996 than those who remained on the job ($17.27; $t(75) = 2.81$, $p<.01$). This difference translates to more than $5,000 per year for full-time directors. Directors who left also worked in programs that paid lower average wages in 1996 to teachers ($12.21 per hour) than centers in which directors remained ($14.86 per hour; $t(68) = 2.00$, $p<.05$). Wages for assistant teachers, however, were not significantly different in centers that kept or lost their director.

Teacher behavior varied by director stability. In centers that lost their directors, teaching staff were rated as harsher toward children than teaching staff in centers where the director did not change ($t(41)=-2.14$, $p<.05$). Teachers without consistent leadership engaged in more punitive and critical interactions with children than teachers in more stable environments.

Goal Two

To identify workplace and individual characteristics that distinguish teaching staff of different skill levels who stay at or leave their jobs.

Finding 5.3

Teaching staff are more likely to remain at their jobs if they earn higher than average wages, and work with a higher percentage of well-trained teaching staff who also remain on the job. Highly-trained teaching staff who belong to at least one professional organization were also more likely to remain on the job.

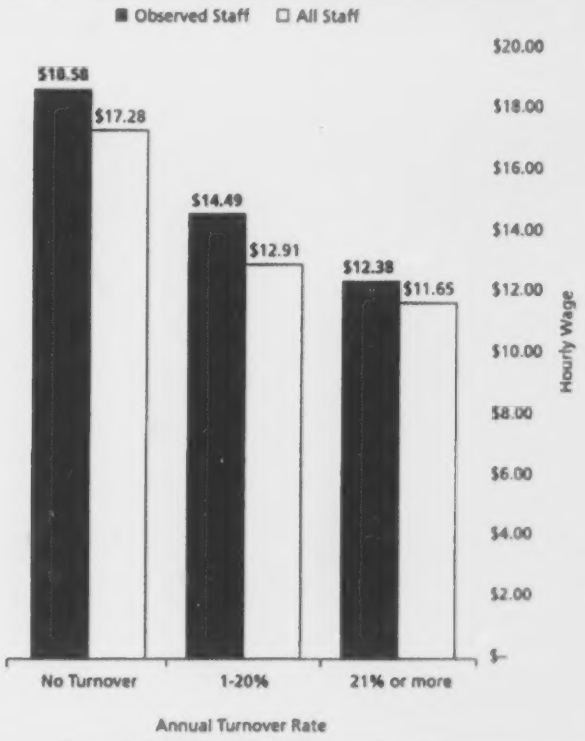

Figure 5.2 Wages for All Teaching Staff and Observed Teaching Staff By Center Turnover Rates

For all teaching staff $F(2,70)=6.99$, $p<.01$;
For observed teaching staff $F(2,42)=5.46$, $p<.05$.
For all and observed teaching staff, centers with 0 percent turnover paid teaching staff higher wages than centers with 1-20 percent or greater than 21 percent turnover.

We examined discriminating characteristics with three different groups of teaching staff. For all teaching staff, highly-trained teachers were more likely to leave their jobs if they earned lower wages, worked in a climate with less stability of highly-trained co-workers, and worked with a greater percentage of teaching staff who did not have a bachelor's degree. Highly-trained teaching staff who stayed earned $3 per hour more than highly-trained teaching staff who left (see Table 5.1). For observed teaching staff, about whom we had more personal information, membership in a professional organization also discriminated who left and who stayed.

Finally, because we had ratings of their sensitivity as well as their educational background for observed lead teachers in each observed classroom, we also ran the discriminant function analysis for this group of teachers, classifying them as high- or low- skilled depending on whether they scored above or below a 3 in "sensitivity" on the Arnett Scale of Adult Involvement (see Table 5.2). This analysis revealed the same pattern with one exception: in addition to wages, background climate, professional affiliation, and highly-trained teaching staff stability, director stability also discriminated between highly-skilled teaching staff who stayed and left.

Multi-faceted benefits can therefore result from paying higher wages– they enable a center to attract individuals who are better-trained, and to create and sustain a staffing pool of higher caliber, which itself promotes stability among qualified staff.

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Table 5.1 Discriminant Function Analyses of Wages, Background Climate, and Turnover Climate Variables for All Teaching Staff and Observed Teachers

Predictor Variable	Correlations Of Predictor Variables with Discriminant Functions		Univ. F++	Highly Trained Stay Mean (SD)	Low Trained Leave Mean (SD)	Low Trained Stay Mean (SD)	Highly Trained Leave Mean (SD)
	Function 1	Function 2					
All Teaching Staff							
Teaching Staff Wages	.76+	-.05	45.14***	$15.03 ($5.24)	$9.37 ($3.02)	$10.84 ($3.36)	$11.93 ($4.68)
Background Climate	.73+	.51	52.52***	.55 (.25)	.30 (.23)	.31 (.25)	.52 (.21)
Turnover Climate	.72+	-.38	46.99***	.55 (.23)	.30 (.09)	.31 (.12)	.52 (.11)
Director Turnover	-.34	.25	13.23***	.15 (.36)	.51 (.50)	.29 (.45)	.41 (.49)
Observed Teachers							
Background Climate	.88+	-.31	22.28***	.63 (.25)	.25 (.24)	.31 (.23)	.52 (.26)
Teacher Wages	.67+	.21	13.86***	$14.39 ($4.50)	$9.29 ($2.24)	$11.68 ($3.03)	$11.91 ($4.84)
Turnover Climate	.70+	.56	16.36***	.33 (.29)	.07 (.11)	.10 (.13)	.13 (.17)
Professional Affiliation	.32+	-.04	2.82*	.60 (.50)	.31 (.46)	.38 (.49)	.49 (.50)
Pension	.12	.10	2.69*	.40 (.50)	.27 (.45)	.54 (.51)	.38 (.49)
Tenure in Child Care	.14	.01	2.74*	10.70 (5.72)	9.02 (5.80)	12.51 (5.64)	10.96 (7.19)
Health Care	.19	-.12	2.37	.44 (.51)	.29 (.46)	.51 (.51)	.49 (.50)

*p<.05, ***p<.0001; +Denotes largest absolute correlation between each variable and any discriminant function.
++For all teaching staff, df=3,629; for observed teaching staff, df=3,184

Table 5.2 Discriminant Function Analyses of Wages, Background Climate, and Turnover Climate Variables for Observed Lead Teachers

Predictor Variable	Correlations Of Predictor Variables with Discriminant Functions		Univ. F++	Highly Skilled Stay Mean (SD)	Low Skilled Leave Mean (SD)	Low Skilled Stay Mean (SD)	Highly Skilled Leave Mean (SD)
	Function 1	Function 2					
Observed Lead Teachers							
Background Climate	.59+	.37	3.47*	.50 (.28)	.29 (.28)	.33 (.29)	.44 (.30)
Teacher Wage	.68+	.02	3.98**	$14.25 ($4.27)	$10.63 ($2.68)	$12.97 ($3.98)	$12.22 ($5.36)
Turnover Climate	.80+	-.05	5.24**	.24 (.27)	.05 (.10)	.13 (.15)	.13 (.19)
Director Turnover	-.46	.65+	3.71*	1.14 (.36)	1.41 (.50)	1.50 (.52)	1.51 (.51)
Professional Affiliation	.52	.58+	3.50*	.64 (.49)	.32 (.47)	.43 (.51)	.63 (.48)

*p<.05, **p<.01; +Denotes largest absolute correlation between each variable and any discriminant function; ++df=3,116.

SUMMARY

Highly-trained teaching staff stay at programs that pay better than average wages, and that retain a greater percentage of other well-trained teachers. Highly-skilled teachers are also more likely to stay at programs that keep their directors. Multi-faceted benefits can therefore result from paying higher wages– they enable a center to attract individuals who are better-trained, and to create and sustain a staffing pool of higher caliber, which itself promotes stability among qualified staff.

We were not surprised to find unabated high turnover among teaching and administrative staff between 1996 and 2000, as detailed in Chapters 3 and 4, for two reasons. First, wage levels, when adjusted for inflation, had declined for most staff. Second, initiatives providing improved compensation for center staff, while under discussion, had not been implemented in the communities of the study between our second and third visits.

FINDINGS: Staffing and Center Quality

This chapter examines the characteristics of programs able to sustain a high level of quality over time and explores how NAEYC accreditation contributes to center quality and staff stability.

OVERVIEW

Nationwide, public and private dollars, along with large amounts of staff time and energy, have been invested in centers to help them improve their quality. A popular approach has involved investments in NAEYC accreditation. While not all centers accredited by NAEYC have been rated as high quality by independent observers, as a group, NAEYC-accredited programs demonstrate significantly better quality than non-accredited programs (Whitebook, et al., 1997; Helburn, 1995; Whitebook, et al, 1990). Furthermore, in the previous phase of this study, we found that centers that succeeded in achieving accreditation, as compared to those which sought but did not gain accreditation status, showed measurable improvements in quality.

Thus, we know that achieving accreditation makes a positive short-term difference. However, a reasonable return on the outlay of time and/or money involved in accreditation, as well as other approaches to enhancing program quality, requires that improvements be maintained over time. The dearth of longitudinal research about early care and education programs has limited assessments of the long-term value of various strategies.

In 1996 our second visits to centers occurred shortly after a center had achieved accreditation status. At that time, we were able to assess whether improvements had occurred in programs, but not whether, or for how long, centers could maintain them. The current study begins to address these issues by assessing center characteristics that predict a *sustained high level of quality* over time, and by examining the extent to which NAEYC-accredited programs maintain positive staffing and quality.

METHODOLOGY

The discussion that follows is based on a sub-sample of 43 centers from the original study. Longitudinal comparisons of quality were made between these 43 centers in 1996 and 2000. Using the Early Childhood Environment Rating Scale (ECERS) and the Arnett Scale of Adult Involvement, we observed two classrooms, or one if the center only had a single room, in each of the 43 centers. (See Chapter 2 for a description of observational measures and a detailed discussion of center characteristics.)

To address the issue of quality ratings over time, we created a variable for sustained quality as the outcome measure, with centers grouped according to whether they had received ECERS ratings of 5 or greater at the 1996 and 2000 visits. We used logistic and multiple regression analyses to address questions related to which programs sustained high quality over time. Our research design allowed us to examine predictors of sustained quality at the classroom and center level. We began by exploring the characteristics of classrooms and centers that had predicted overall quality in our 1996 sample: accreditation status, nonprofit status, higher wages paid to teaching staff, and the retention of highly-skilled teachers.

Our initial analyses indicated that in 2000 nonprofit programs were significantly more likely to receive higher overall ECERS and materials subscale ratings, although there were no auspice differences for the tone subscale or teacher interactions as measured

by the ECERS and the Arnett (see Glossary for definitions of tone and materials subscales). Because of the relatively small numbers of for-profit programs, as well as the reduced size of our observed sample in 2000 (which limited the number of variables we could test), we focused on wages, background, and turnover climate as predictors of sustainable quality.

OBSERVED CENTERS 2000

Accreditation Status

Nearly half of our observed sub-sample of centers (42 percent) was accredited by NAEYC at the time of our third visit in 2000. Our sub-sample is extremely complex with respect to accreditation status, however, because several centers changed status between 1996 and 2000. For example, two of the 18 centers accredited in 2000 were not accredited in 1996. Of the 25 non-accredited centers in 2000, three had been accredited in 1996. Because we are interested in the question of sustaining quality in general, as well as lasting improvements in accredited programs, our discussion moves between two cohorts of accredited centers–one based on accreditation status in 1996 and the other based on accreditation status in 2000. The group under discussion is indicated in the text.

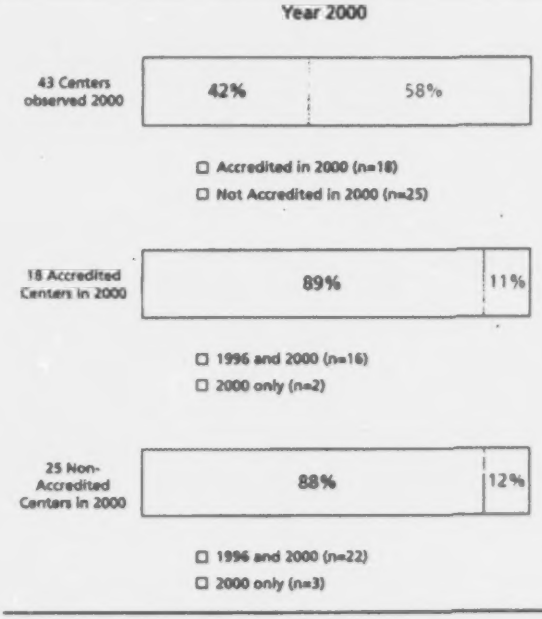
Quality Ratings

In the descriptions of center quality that follow, as represented in Tables 6.1 and 6.2, we compare quality for two groupings of programs: the first group refers to centers based on their accreditation-status in 1996; the second refers to centers based on their accreditation status in 2000.

ECERS ratings

Based on their accreditation status in 2000, three-fifths of non-accredited programs, and slightly more than one-quarter of accredited programs, were rated as mediocre in 2000. Average overall ECERS scores did not change significantly for programs accredited in 1996 and 2000.

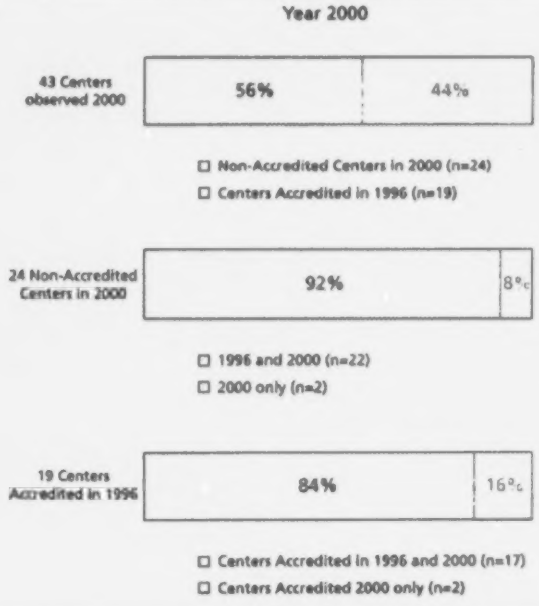
Figure 6.1 Accreditation Status in 2000 of Observed Centers, 2000



Programs not accredited in 1996, as a group, demonstrated improvement in average ratings of overall quality between 1996 and 2000 ($F(2,38)=9.98$, $p<.01$). The two observed centers that became NAEYC-accredited between our second (M=4.82, SD=1.04) and third (M=5.76, SD =.29) visits improved noticeably in quality, underscoring our previous finding that centers that succeed at accreditation significantly improve in quality.

In 1996, accredited programs were rated higher in quality (M=5.22) than non-accredited centers (M=4.17), although 39 percent of the accredited programs (n=9) received overall mediocre ECERS ratings shortly after becoming accredited in 1996. Seven of these programs were revisited in 2000, one was closed and another was interviewed-only. All seven of the NAEYC-accredited programs rated mediocre in quality in 1996 that were re-visited, continued to be rated as mediocre (below 5 on the ECERS) in 2000. Two of these programs were no longer accredited in 2000.

Figure 6.2 Accreditation Status in 1996 of Observed Centers in 2000



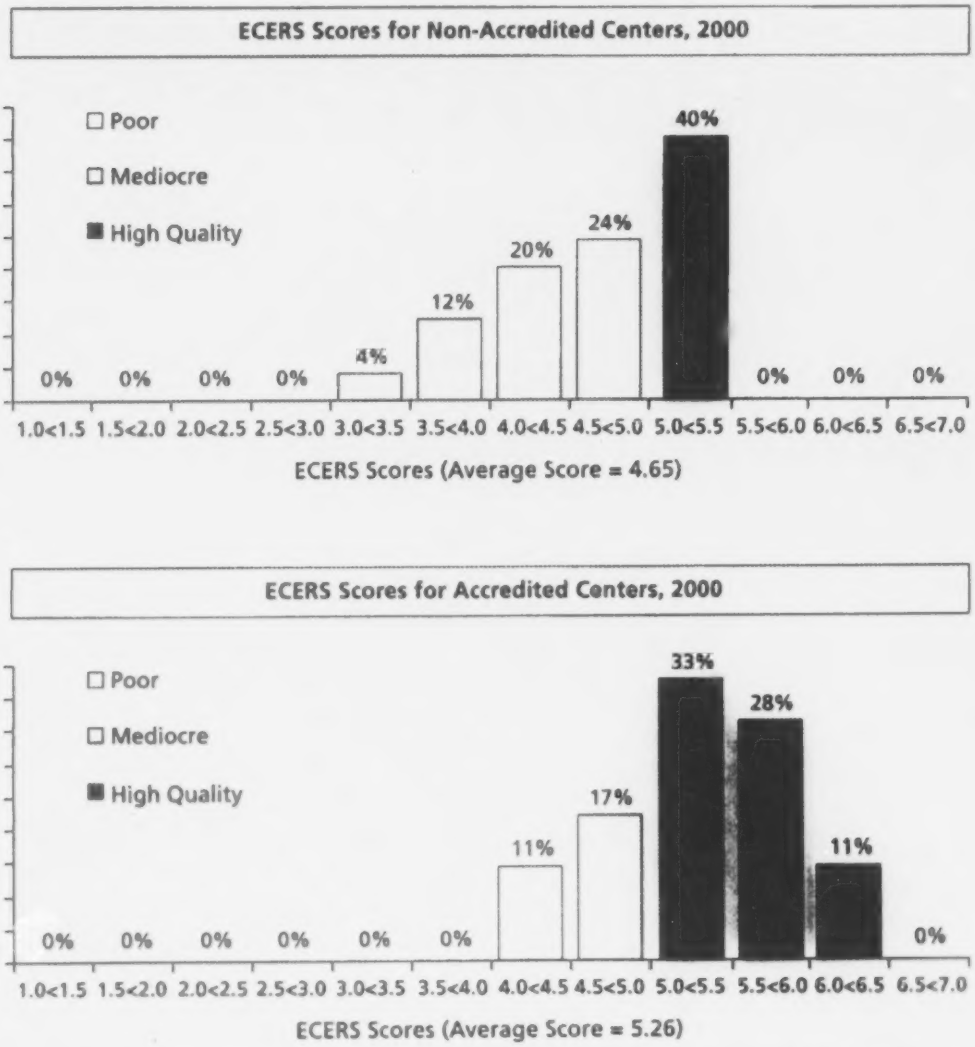
Arnett Scale of Adult Involvement Ratings

As measured by the Arnett Scale of Adult Involvement (see Table 6.2), teaching staff in centers accredited in 1996 and 2000 were rated as significantly more sensitive and less harsh in 1996 than centers not accredited in 1996. Teaching staff in centers accredited in 1996 and 2000 were rated as less harsh, but not more sensitive in 2000 than their counterparts in centers that were never accredited. There were no differences in teaching staff detachment among any of the groups at either set of visits. For sensitivity, scores for all centers as a group tended to increase, i.e., teachers were rated as more sensitive in 2000 than in 1996 ($F(1,38)=9.98$, $p<.01$), but there were no accreditation differences, reflecting in part the improvement among non-accredited programs. As detailed in Table 6.2, teaching staff in all accredited centers in 2000, as well as newly accredited programs, were rated as less harsh than their colleagues in no longer accredited and all non-accredited programs.

Table 6.1 Early Childhood Environment Rating Scale Scores: Comparison of Non-accredited and Accredited Centers, 1996 and 2000

	1996			2000		
ECERS	M	SD	Range	M	SD	Range
Accredited 1996 and 2000 (n=16)	5.31	.70	3.88-6.25	5.26	.59	4.11-6.28
Accredited 1996 only (n=3)	4.80	.29	4.46-4.97	4.52	.25	4.23-4.72
Not accredited 1996 and 2000 (n=22)	4.02	.69	2.70-5.46	4.66	.63	3.01-5.46
F	16.91, p<.0001; acc2,3>not acc2,3	---	---	5.25, p<.01; acc2,3>not acc2,3	—	—
Accredited 2000 (n=18)	5.25	.72	3.88-6.25	5.32	.60	4.11-6.28
Not accredited 2000 (n=25)	4.11	.70	2.70-5.46	4.65	.60	3.01-5.46
t	-5.21, p<.001; acc3>not acc3	---	---	-3.69, p<.01; acc3>not acc3	—	—

Figure 6.3 Early Childhood Environmental Rating Scale Scores: Non-accredited and Accredited Centers, 2000



Summary of Quality Findings

Overall, the centers that comprise the accredited groups in 1996 and in 2000 received higher overall ratings than non-accredited centers. Teachers in accredited centers were rated overall as more sensitive in their interactions with children than teachers in non-accredited centers in 1996. There were no differences in sensitivity between teachers in accredited and non-accredited centers in 2000. Teachers in accredited centers were rated as less harsh toward children at both visits. It is difficult to discern the reason for these changes in the comparisons of sensitivity between teachers in accredited and non-accredited centers between 1996 and 2000. It could be a function of improvements in educational levels and training among teaching staff in non-accredited programs, or it could reflect the strains of high turnover.

Table 6.2 Arnett Scale of Adult Involvement: Comparison of Non-accredited and Accredited Centers, 1996 and 2000

	1996			2000		
Sensitivity	M	SD	Range	M	SD	Range
Accredited 1996 and 2000 (n=16)	3.34	.51	2.20-4.00	3.64	.28	2.80-3.90
Accredited 1996 only (n=3)	3.27	.71	2.50-3.90	3.40	.23	3.20-3.65
Not accredited 1996 and 2000 (n=22)	2.91	.43	1.85-3.60	3.45	.42	2.50-4.00
F	3.82, p<.05; acc2,3>not acc2,3	—	—	Not significant	—	—
Accredited 2000 (n=18)	3.34	.51	2.20-4.00	3.67	.28	2.80-3.95
Not accredited 2000 (n=25)	2.96	.47	1.85-3.90	3.45	.39	2.50-4.00
t	-2.57, p<.05; acc3>not acc3	—	—	p=.06	—	—
Harshness						
Accredited 1996 and 2000 (n=16)	1.31	.41	1.00-2.67	1.28	.21	1.11-1.89
Accredited 1996 only (n=3)	1.09	.08	1.00-1.17	1.33	.29	1.11-1.67
Not accredited 1996 and 2000 (n=22)	1.69	.65	1.00-3.44	1.51	.31	1.11-2.11
F	3.14, p=.055; acc2<not acc2,3	—	—	3.59, p<.05; acc23<not acc2,3	—	—
Accredited 2000 (n=18)	1.29	.39	1.00-2.67	1.49	.31	1.11-1.89
Not accredited 2000 (n=25)	1.61	.64	1.00-3.44	1.27	.20	1.11-1.33
t	Not significant	—	—	-2.85, p<.01; acc3<not acc3	—	—
Detachment						
Accredited 1996 and 2000 (n=16)	1.60	.75	1.00-3.75	1.36	.30	1.36-1.75
Accredited 1996 only (n=3)	1.42	.38	1.00-1.75	1.58	.44	1.13-2.00
Not accredited 1996 and 2000 (n=22)	1.86	.57	1.00-2.75	1.24	.29	1.00-2.00
F	Not significant	—	—	Not significant	—	—
Accredited 2000 (n=18)	1.58	.71	1.00-3.75	1.33	.29	1.00-1.75
Not accredited 2000 (n=25)	1.81	.57	1.00-2.75	1.29	.32	1.00-2.00
t	Not significant	—	—	Not significant	—	—

FINDINGS

Goal Three

To assess the relationship between staffing and sustaining the quality of care.

Finding 6.1

Approximately one-third of observed centers sustained high quality between our second and third visits. The presence of a greater proportion of highly-trained teaching staff in 2000 is the strongest predictor of sustainable quality. Wages is also a significant predictor.

Centers in the sample rated high in quality (overall 5 or higher on ECERS) in both 1996 and 2000 were considered for this study to have sustained high quality care. Thirteen of the forty-three centers (32 percent) in the sub-sample of observed programs in 2000 met these criteria. All but two (85 percent) were NAEYC-accredited at both visits, reflecting the larger proportion of high-quality programs among the accredited group. Of the NAEYC-accredited programs rated high in quality in 1996, two-thirds sustained these ratings.

A major question for this study is what predicts whether programs are able to sustain a high level of quality over time. We examined this question in two ways. First, we tested the following characteristics at the classroom level using hierarchical multiple regression: 1) observed lead teacher background, 2) observed lead teacher salary, and 3) the percentage of highly-trained teaching staff who remained on the job. (See Table 6.3.) Highly-trained teachers were defined in this study as possessing at least a bachelor's degree and specialized, college-level early childhood education training.

Second, we also tested the following variables at the center level using logistic regression: 1) background climate, i.e., the percentage of teachers currently working in the center with advanced educational and training backgrounds; 2) turnover climate, defined in this analysis as the percentage of teachers with high educational background who stayed in the center over the course of the study and whether the director remained on the job over the four year period, and 3) wages for all teaching staff (see Table 6.4).

At both the classroom and center levels of analysis, the presence of a greater proportion of highly-trained staff predicted whether centers rated high in quality were able to sustain high-quality ratings over the four years between our second and third visit. At the classroom level, wages also predicted sustainable quality.

In a climate where turnover is rampant (see Chapter 3) and replacement staff are less well-trained overall than those who leave (even in high-quality centers), a program's success in attracting well-trained teaching staff and keeping them, whether or not they stay for long, emerges as critical. As the comments of teaching staff and directors reflect in the previous chapters, their jobs are made more difficult by having

Table 6.3 Multiple Regression Predicting Sustained Quality from Center Characteristics (Classroom Level)

Predictor Variables	R	R^2	Final B	sr^2	t
Teacher Background	.37**	.14	.16	.16	1.87
Teacher Wages	---	---	-.19	-.18	-2.10*
Background Climate	---	---	.34	.30	3.61**

*p<.05, **p<.001.

to continually train and orient new co-workers. Newcomers with high levels of skill and training as well as highly-trained veteran teachers become precious resources with tremendous impact on the quality of services.

Finding 6.2

The presence of a greater percentage of highly-trained staff, the key determinant for sustaining high levels of program quality, was predicted by the percentage of teachers with high educational background who stayed at the center between 1996 and 2000, and wages paid to teachers.

If highly-trained staff are essential to sustaining quality, it becomes critical to understand what draws and keeps people on the job. The proportion of highly-trained staff that a center is likely to have at a given time is a function of both who they have been able to attract to their program, and who they have been able to retain.

We used hierarchical multiple regression to determine center characteristics that predict the presence of highly-trained staff employed at a center in 2000. Based on findings from other studies and our earlier exploration of these centers, we tested the following characteristics that had previously been associated with the presence of more highly-trained staff: 1) teacher wages, 2) turnover climate, using the variable of the percentage of other highly-trained staff that had remained since 1996, and 3) the stability of the director. The percentage of other highly-trained staff that had remained on the job and wages paid by a center predicted the level of highly-trained teaching staff employed in the program. This regression confirms the characteristics of programs identified in the previous chapter that differentiated whether highly-skilled teaching staff stayed or left their jobs between 1996 and 2000.

Finding 6.3

NAEYC-accredited programs, as a group, continue to demonstrate higher overall quality than other non-accredited programs. However, NAEYC-accredited programs did not experience significantly lower turnover among teaching or administrative staff between 1996 and 2000 or between 1999 and 2000 than non-accredited programs in our sample.

There were no significant differences between currently accredited and non-accredited centers with respect to annual turnover reported by directors, nor were their differences among those accredited in both 1996 and 2000, those only accredited in 1996, or those accredited and non-accredited in 1996. This was true for the full sample of 75 centers as well as the observed sub-sample.

Centers accredited by NAEYC were not immune to changes in administrative personnel: turnover rates among directors from centers accredited in 1996 (45

Table 6.4 Logistic Regression Predicting Sustained Quality from Center Characteristics (Center Level)

Predictor Variables	Final B	R	Wald
Director Turnover	-1.51	-.08	2.31
Turnover Climate	1.91	0	.35
Background Climate	5.20	.26	5.27*
Teaching Staff Wage	-.17	0	1.25

$\chi^2(4)=10.51$, $p<.05$; 74 percent correct prediction; *$p<.05$.

Table 6.5 Multiple Regression Predicting the Presence of Highly-Trained Staff from Wages and Turnover Climate

Predictor Variables	R	R^2	Final B	sr^2	t
Turnover Climate	.61***	.37	.43	.39	3.32**
Teacher Wages	---	---	.26	.25	2.10*
Director Turnover	---	---	.08	.10	.79

*p<.05, **p<.01, *** p<.0001.

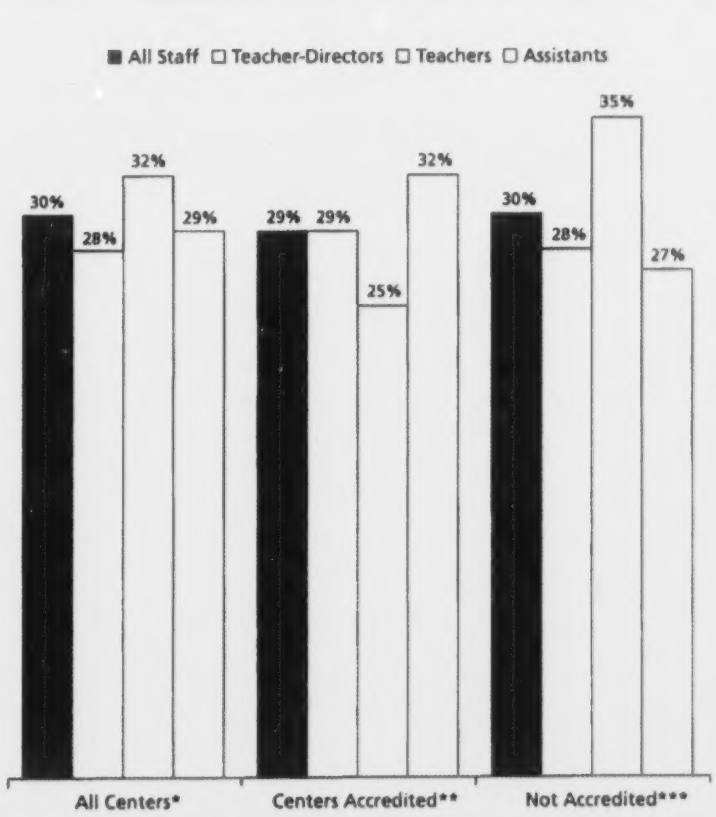


Figure 6.4 1999-2000 Turnover Rates by Accreditation Status for All Centers

Results: No significant differences between currently accredited and non-accredited centers; also no significant differences between those accredited in 1996 and other centers or those accredited in 1996 and 2000 and those no longer accredited.
* n=75
** n=24
***n=51

percent) were not significantly different than those for non-accredited centers in 1996 (38 percent).

At first glance, this finding about turnover appears to run counter to the identification of NAEYC-accredited programs, on average, as higher in quality in 1996 and 2000, as well as heavily represented in the group of programs that sustained quality between our second and third visits. However, the finding is consistent with other findings in this study.

First, neither in 1996 nor 2000 did NAEYC-accredited programs pay higher than average wages than non-accredited programs across all positions. NAEYC does not articulate wage standards for programs undergoing accreditation (NAEYC, 1998).

Second, between 1994 and 1996, we also found accredited centers were just as likely as others to lose highly-skilled teaching staff and to retain less-skilled staff as the other programs in our sample; only those accredited centers with lower turnover were rated high in quality. Although NAEYC-accredited programs must complete an annual report on the first anniversary of their accreditation, and programs with 50 percent or more staff turnover are usually required to have a verification visit, this visit is not mandatory (NAEYC, 1998).

Third, it is perhaps most important to remember that not all NAEYC-accredited programs were rated high in quality, either in 1996 or in 2000. In 2000, nearly 30 percent of the accredited centers were rated as mediocre in overall quality. In 1996, 39 percent of accredited programs were rated as mediocre. Thus, although as a group, NAEYC-accredited programs are significantly higher in quality, NAEYC accreditation is not a guarantee of high quality or of a program's ability to sustain quality over time. Only those NAEYC-accredited programs that pay higher than average salaries are able to attract highly-skilled staff and thus sustain quality over time.

SUMMARY

Despite high levels of turnover and the challenge of working amid staff instability, programs accredited only in 1996 as well as those accredited in 1996 and 2000 did not significantly increase or decrease their average ratings of overall quality between our second and third visits. Some non-accredited programs actually improved in quality during this period of time. This is a tribute to the incredibly hard work of those caring for and educating our young children in this sample of relatively high-quality programs.

In the previous phases of this study, we found that programs with greater instability among staff were hampered in their efforts to improve their services and to achieve high-quality ratings. This latest phase of the study, which permitted us to track centers that had succeeded at accreditation and/or had achieved high levels of quality, suggests that a program's success at sustaining quality requires a team of well-trained teaching staff. Attracting highly-skilled staff requires not only better than average wages but also consistency among other highly-qualified staff. Only one-third of the programs in this relatively high-quality sample succeeded at sustaining a high level of quality over a four-year period.

NAEYC accreditation is a positive strategy for improving quality, but even accredited centers are not immune from the turnover that plagues all early care and education programs. High turnover, and the inability to attract highly-skilled teaching staff, prevents all programs from achieving and maintaining quality services. The challenge that remains is to craft initiatives and secure public investments that will fortify the improvements that NAEYC-accredited and other programs make. That requires creating better paying jobs that reward education and training for those caring for and educating young children.

In the conclusion of this report, we turn to how communities are addressing the problem of staff instability, a problem affecting programs nationally, often more severely than the programs in this study. We also identify additional recommendations that can lead to making child care a career that attracts and retains highly-qualified teachers and directors–the cornerstone of growth-enhancing services for young children.

CONCLUSIONS & RECOMMENDATIONS

CHAPTER 7

An acute problem left unattended eventually becomes the *status quo*, yet it is no less in need of urgent attention. So it is with the child care staffing crisis. For three decades advocates and researchers have sounded warnings that without a massive sustained effort to improve child care employment, turnover will continue unabated and children and families will suffer the consequences. So, too, will their caregivers who desperately want to continue working with young children without sacrificing their own well-being and that of their families.

The findings reported here provide further evidence that the loss of teachers for preschool children is equal to, if not greater than, the staffing crisis plaguing elementary and secondary schools. Still, there is a profound reluctance on the part of many policymakers and other stakeholders to confront the problem head-on. While bold, and as yet untested, proposals to address the shortage of K-12 teachers emanate from high-level policymakers in California and across the nation, child care advocates face continuing skepticism about investments in the early care and education workforce (Burton, Mihaly, Kagiwada, and Whitebook, 2000).

In his 1998 veto message of legislation for C.A.R.E.S., a pilot program to provide professional development stipends to child care workers, former California Governor Pete Wilson wrote:

> *"While recognizing the important role child care providers play in caring for our children, I do not believe it is appropriate for the State of California to provide wage subsidies or otherwise interfere in the private child care market. This bill would introduce state regulation of wages into a field that is currently controlled by the market, and allow direct wage supplements to private sector employees. This may constitute a gift of public funds."*

His successor Governor Gray Davis eventually signed a substantially modified version of the bill in 2000 for $15 million targeted only to teachers in state-funded programs, but expressed grave concerns about the plan:

> *"While turnover in the child care profession may create problems for certain communities in filling vacancies in a timely manner, I am not convinced that this approach is warranted. I am concerned with both introducing direct state subsidies into an occupation or profession which is subject to local market forces as well as establishing a costly new state responsibility that will grow rapidly over time."*

Yet shortly thereafter, Governor Davis presented proposals to the state legislature to spend $55 million to boost starting salaries for credentialed K-12 teachers throughout the state and to create a limited time state income tax reduction ranging from $250 for teachers with four to five years experience to $1,500 for teachers with 20 or more years of experience to pay for unreimbursed educational expenses. These bills (AB 2870, SB1643) passed the legislature in 2000 and were signed into law by the Governor. These policies underscore the disparate views of the crisis in attracting and retaining teachers for younger versus older children, and reflect a different assessment of public commitment to ameliorating the problems.

Public will is only a part of the problem. K-12 teachers are better organized and represented by

unions and professional organizations, and constitute a more uniform group with respect to qualifications and funding sources. These conditions make it easier to develop and implement policy in K-12 education than in preschool settings. Because universal publicly-funded services for preschool are not mandated as they are for K-12 education, there are multitudes of claims for every public dollar allocated for younger children. Should more children be served? Should parent costs be reduced? The needs of child care teachers and providers fade in light of such questions.

For three decades advocates and researchers have sounded warnings that without a massive sustained effort to improve child care employment, turnover will continue unabated and children and families will suffer the consequences.

Fortunately, in California a new and ongoing source of public dollars has created unprecedented opportunities with respect to child care staffing. Proposition 10, a permanent tobacco tax available to all counties in California for programs focused on children ages zero-five, provides local funding, as well as some statewide dollars, to improve early childhood development services. Indeed, Governor Davis, when initially rejecting the C.A.R.E.S. statewide proposal, urged, "This source may be an alternative to the extent local commissions believe the problems of staff turnover are of sufficient local priority. In any event, I believe local discretion is preferable to creation of a costly new statewide program." Advocates throughout the state seized the opportunity created by Proposition 10 in 1999, and have proposed, and in a few counties implemented, a version of the C.A.R.E.S. program, in some cases augmented by additional sources of funding.

A local Proposition 10 Commission in one of the three counties in which this study took place has recently adopted a C.A.R.E.S.-type proposal that is scheduled to be implemented later this year. Advocates in the two other counties, as of this writing, are struggling to get approval for similar plans. These proposals will provide stipends ranging from several hundred to several thousand dollars per individual based upon their level of education and experience. The hope is that these stipends will slow the rapid drain of workers from centers and home-based child care services. The Statewide Proposition 10 Commission is augmenting local investments by providing matching grants ranging from 25 to 50 cents on the dollar, with smaller counties receiving the larger match. The Statewide Commission will provide the match to fourteen counties in 2001, with the possibility of including more counties as additional local programs are initiated.

While celebrating the stipends and the encouragement and support they carry to the workforce, advocates recognize that stipends remain an "add on" which must be applied for every year, rather than a permanent salary increase upon which teachers and their families can truly depend. Consequently, advocates in several counties across the state are enlisting support from other local public and private sources to design more efficient and lasting mechanisms to upgrade child care jobs.[1] Thus, even as the first generation of "compensation" initiatives gets off the ground, conversations about next steps have begun to generate proposals that can lead to quick and substantial progress toward closing the economic and status gap between teachers, based on the age of the children they teach.

Crafting and implementing such proposals will require the attention, creativity and resources of the American public and its leaders. Services for young children, like those for elementary, secondary and college students, must be seen as a public good, rather than a service underwritten primarily by families.

[1] The Center for the Child Care Workforce routinely updates state and local initiatives to improve child care jobs. See their website at www.ccw.org.

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C.A.R.E.S.: The Compensation and Retention Encourages Stability Programs

As originally written, the California C.A.R.E.S. proposal was intended to help build and reward a skilled and stable child care workforce throughout the state through two major programs:

- The **Child Development Corps**, which includes family child care providers and center-based staff (including teachers, site supervisors, and directors) who meet certain education and training qualifications, commit to continuing their professional development for at least 21 hours per year, and agree to provide child care services for a specified period of time. Members of the Corps receive monetary rewards ranging from $500 to $6,000 per year, depending on their education and background. (For more detail about the stipends, see Burton, et al., 2000 or www.ccw.org).

- **Resources for Retention**, which provides additional support to public and private child care programs that are committed to improving quality, by providing differential reimbursement rates and Quality Improvement Rewards to help the programs achieve accreditation and improve staff retention.

While C.A.R.E.S. addresses the compensation of the child care workforce by providing professional development rewards for existing and future education and training, it does not raise these workers' base salaries or hourly earnings, and thus cannot strictly be considered a "compensation initiative."

Although each county is free to make variations on this model to meet local needs, the five points below define the core principles of California C.A.R.E.S as developed by the Center for the Child Care Workforce and agreed to by its cosponsors, the California Association of Young Children and the California Labor Federation.

1. The Child Development Corps is open to home-based, licensed and exempt family child care providers, family child care assistants, and center-based staff in public and private child care programs. In center-based programs, all teaching staff and all administrative staff who supervise their work with children are eligible, regardless of job title and programs type, including for-profit, faith-based, private nonprofit and subsidized programs.

2. Stipends reward individuals both for attained education and for continuing education and professional growth.

3. Stipend increments are based on the Child Development Permit Matrix, the statewide professional development system for teaching and administrative staff. The Matrix system is mandatory for certain subsidized programs that must meet more stringent funding requirements, and can be voluntarily adopted by other programs.

4. Stipends reward individuals who have been at their current child care job for a minimum of one year.

5. Stipends for those with higher levels of education seek to bridge the gap between child care and elementary school salaries.

Adapted with permission from *The C.A.R.E.S. Initiative in California: Pursuing Public Policy to Build a Skilled and Stable Child Care Workforce*, 1997-2000 (Burton, et al. 2000).

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A Message to the President of the United States from Child Care Teachers and Directors

Former and current directors and teaching staff were asked:

"If the President of the United States were to ask you what one thing the government could do to reduce staff turnover in child care programs, what would you recommend?"

Better pay, supported by government funds, coupled with greater respect, topped the list of suggestions made by staff in all positions:

What Former Child Care Directors Said:

> "I would tell the President we must pay teachers what they are worth. Those who take care of young children get practically nothing, while others get so much more. So many great teachers have left for higher pay in other jobs."

Although some directors expressed concerns about increased paperwork stemming from governmental involvement and fears that the money might go to administrators instead of teachers, most recognized that the only solution to the staffing crisis lay beyond their individual programs. Many thought increased pay should be linked to higher education or training standards if "we want to change the perception of the public that this field is not glorified baby sitting but a professional position that deserves better wages."

What Current Directors Said:

Eighty-five percent of current directors recommended better salaries, and the remainder suggested better overall funding for programs and greater respect and professional standards.

> "Recognize child care workers as teachers. Support and fund child development programs to enable staff to live beyond poverty. They don't choose to leave, they have to leave."

> "Bring our income up to the level of public school salaries"

> "Raise the level of professionalism and tighten the initial requirements so that we will be better respected and get the salaries we deserve."

What Current and Former Teaching Staff Said:

Like the directors of programs, teaching staff make the case to the President about the need for better pay. Overwhelmingly, they saw a change in the salary structure as the key to reducing turnover.

> "Teachers should be paid decent wages for the responsibility they have instead of being overlooked. It's hard to live on these salaries. Many teachers are working two jobs!"

> "People need to realize that preschool teachers aren't just babysitters, but do academic and developmental work in the classroom. I get so much more respect as an elementary school teacher, but I am doing the same job."

> "Translate the value of early childhood teachers into better pay."

> "Pay teachers better so we can survive and do our jobs. Most teachers that leave the field, leave because they don't make enough money, not because they don't like the job."

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Even middle-class families cannot afford the cost of elementary, secondary or college education without public support. The high rates of turnover fueled by low wages, in this sample of child care programs serving mostly middle-income families, suggests the same is true for preschool education. The price tag will be steep, estimated by some in the billions of dollars, but ultimately it is an investment guaranteeing a positive return (Helburn and Bergmann, in press).

The persistent crisis in child care staffing and its detrimental consequences for program quality and children's development has been well documented (Phillips, et. al, 1996; Helburn, 1995; Whitebook, et al., 1990; Whitebook, et. al, 1997). Successful programs to help centers improve in quality, such as NAEYC accreditation, mentoring, and other training programs that help teachers and directors hone their teaching and caregiving skills are necessary and important contributions to upgrading learning environments for children. But at the heart of the crisis lies the insufficient resources to attract and retain a workforce able to sustain developmentally appropriate environments for children (Bellm, 1994). The severity of the staffing crisis in this sample of relatively high-quality centers suggests that programs with fewer resources face an even more critical situation. Compensation for those who care for young children must be increased dramatically and quickly.

In offering the following recommendations for action, we echo the suggestions made to us by teaching staff and directors interviewed in this study. We urge all who agree that well-trained, consistent, and well-compensated teachers and providers are essential to children's development and later success in school, to work together to implement them.

- ***Expand the focus of K–12 educational reform, and the resources dedicated to it, to include the preschool years.***

Teacher training institutions, school districts, teachers' unions, and local and state governmental policymakers are assessing the quality of American education and proposing strategies to improve it. Despite massive evidence about the importance of early learning for later success in school, many of these discussions ignore children prior to the age of five. While many states are implementing publicly funded Pre-Kindergarten programs for three and four year olds, these programs are seldom universal and many do not sufficiently address the qualifications and compensation of the teaching staff (Children's Defense Fund, 1999). Educational reformers who understand the importance of early learning are urged to expand the debate to encompass the problems of early childhood education, specifically the crisis in securing a skilled and stable pool of teachers and providers.

- ***Convene bipartisan think tanks of national and state leaders to generate proposals to finance early care and education services for the civilian public on a par with those available to military families.***

Over the last decade, the United States military has upgraded the qualifications and compensation of child care personnel, resulting in greatly improved services. Cost savings resulting from reduced turnover (Bellm, 1994; National Women's Law Center, 2000) offset a substantial portion of these changes. Congressional leaders are encouraged to examine how the military accomplished these reforms and to generate strategies to create sustained funding that will establish a more coherent, high-quality civilian early care and education system that is affordable for all families and provides better employment for those who deliver it.

- ***Sponsor national legislation that encourages and augments state and local investments to improve compensation linked to the educational attainments of those who work with young children.***

The child care staffing crisis described in this report is not limited to California. Low wages and high turnover are identified as barriers to the cre-

ation and expansion of quality services nationwide (Center for the Child Care Workforce, 2001). This study reinforces previous research documenting the relationship between establishing and sustaining high-quality services and the need for well-educated and stable teaching staff. Training and professional development initiatives are necessary, but without additional financial supports, are not sufficient to keep qualified staff in the field.

Although still limited, a number of states and communities are experimenting with programs that provide stipends like those in California, wages increases, or health benefits to child care teachers and/or providers. Yet many of these are pilot programs are available to only a small group of workers, or are offered on a short-term basis because local and state funds are not sufficient to cover the costs for all those who work with young children. Congress and the President are encouraged to create national policy that will promote and expand these efforts.

• ***Routinely collect and publicize data about the characteristics of the child care workforce, so that we can gauge the progress of initiatives to improve pay and benefits, mitigate the deleterious effects of staff turnover, and keep this important issue in the public eye.***

This study documents staffing changes over time within a group of relatively high-quality child care centers. The full picture will only be known through further study of centers representing all levels of quality, as well as home-based and informal early care and education settings. A census of all child care workers in eight California counties will soon be undertaken, and is hoped to eventually extend statewide and be conducted biannually, to document the actual number, qualifications, and turnover of the individuals who provide crucial care and education for young children

Policymakers are encouraged to support ongoing research about the child care workforce and efforts to improve jobs and services.

• ***Encourage those working with young children to organize and strengthen their voice for increased pay and improved benefits, as well as greater access to education and training.***

The teachers and directors interviewed for this study articulately describe the costs to themselves, their families and to the children in their programs that accrue from high turnover and low wages. Many want to continue to work with young children, but find it impossible to do so, primarily for financial reasons. In order to change current conditions that keep many qualified teachers from staying at their jobs or in the field, it is critical for teachers themselves to challenge the job conditions that undermine the consistency and quality of care that young children receive. Teachers and others who work with young children must join together to do so. Teachers, directors and providers who are currently members of professional groups and unions are encouraged to reach out to their colleagues and encourage them to work alongside them for changes. They are also encouraged to enlist parents of children in their programs in a campaign to improve child care jobs and services.

We know how to ameliorate the staffing crisis in early care and education. The tragedy is that we neglect to do it. As a society, we shortchange our children and our future when we fail to deliver on the promise that high-quality early childhood programs carry: enhancement of children's development and learning and later success in school. The time is well past due for the American public to demand a major investment in education and care of all children during their earliest years.

APPENDIX A

NAEYC Accreditation as a Strategy for Improving Child Care Quality: An Assessment

Highlights of Major Findings (Marcy Whitebook, Laura Sakai, Carollee Howes, 1997)

This study is the first large-scale longitudinal assessment of the NAEYC accreditation process to address questions about the degree to which centers seeking accreditation improve in quality, the level of quality that different centers achieve, and the types of support that are necessary to assist them. The study examined centers when they began seeking NAEYC-accreditation in 1994, tracked them over a five-year period of time, and compared them to other centers in their communities. Classroom observation and interviews with center directors and teaching staff in 92 child care centers in three California communities provided the following information about child care quality and the NAEYC accreditation process.

- Centers that achieve NAEYC accreditation demonstrate higher overall classroom quality at the time of embarking on the self-study process, and show greater improvement in overall quality ratings, staff-child ratios and teacher sensitivity scores, than do centers that seek accreditation but do not achieve it.

- Despite improvements made by centers achieving NAEYC accreditation, nearly 40 percent continue to be rated as mediocre in quality.

- All centers in the sample–including accredited centers–had turnover rates for teaching staff that approached or exceeded 50 percent in the 20-month period of the study. Accredited centers were just as likely as others to lose highly-skilled staff and to retain low-skilled staff. Quality did affect turnover, however: centers–whether accredited or not–that retained a greater percentage of highly-skilled teachers were significantly more likely to receive good or better ratings on overall classroom quality. Teachers who remained on the job earned significantly higher wages.

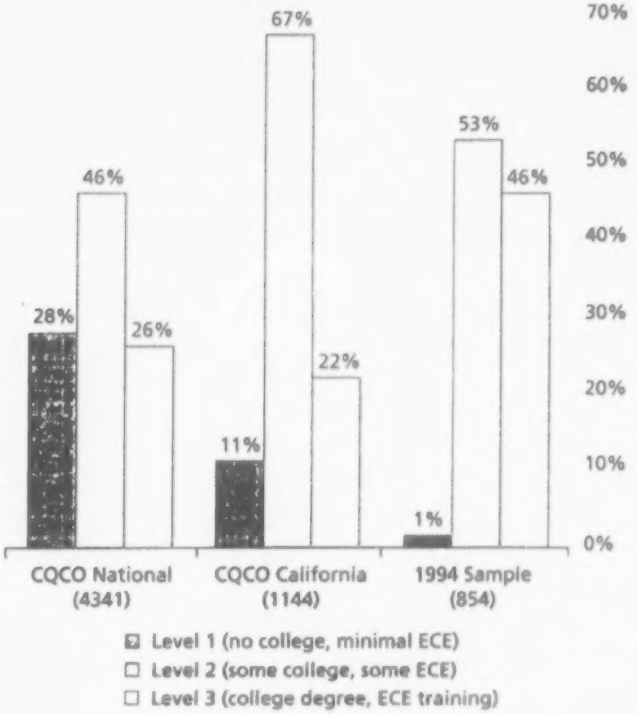
- NAEYC-accredited centers are no more likely than non-accredited centers to meet the linguistic needs of children who speak languages other than English.

- Nonprofit status, higher wages paid to teaching staff, and the retention of skilled teachers, in combination with NAEYC accreditation, are predictors of high quality in child care centers.

- Highly-skilled teachers are as likely to leave accredited as non-accredited centers. Skilled teaching staff are more likely to remain at their jobs if they earn higher-than-average wages, work with a higher percentage of well-trained teaching staff, and work in a climate where other well-trained and educated teachers (as well as the director) remain on the job.

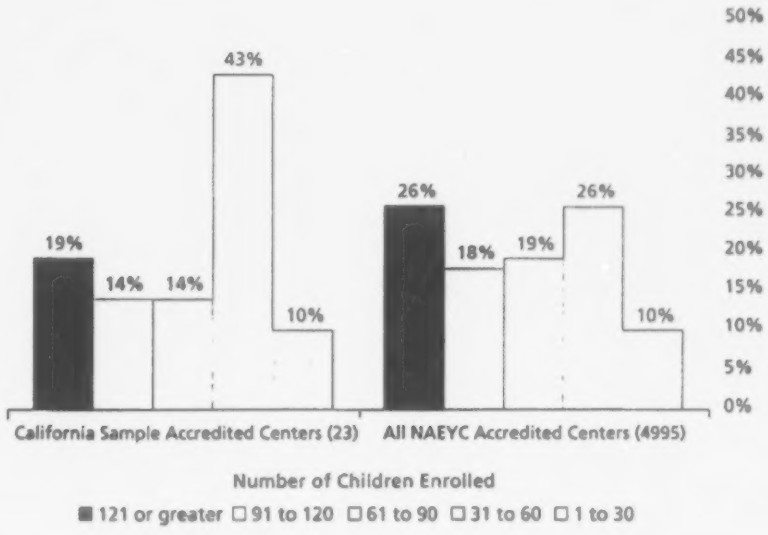
- In accredited and non-accredited centers alike, highly-trained teaching staff who left their jobs and highly-trained replacement staff earned considerably less than their colleagues who remained on the job between 1994 and 1996, suggesting that turnover among highly-trained teachers will continue unabated.

- Centers seeking but not achieving accreditation demonstrate no improvement in classroom quality, staff-child ratios or staff-child interactions.
- Centers that achieved accreditation experienced less teaching staff turnover during the self-study process than did other centers participating in self-study that did not become accredited.



Appendix A Figure 1 Teaching Staff Educational Background: Comparison of the 1996 Sample with California and National Samples of the Cost, Quality and Child Outcomes Study

Note: Sample size represents the number of employed teaching staff.



Appendix A Figure 2
Center Size: Comparison of Accredited Centers in the 1996 Sample and Nationally

Appendix A: Table 1	**Early Childhood Environment Rating Scale (ECERS) Scores: Comparison of the 1996 Sample with California and National Samples of the Cost, Quality and Child Outcomes Study**			
ECERS Scores*	1994[a]	1996[b]	CQCO Study California Preschool Sample[c]	CQCO Study National Preschool Sample[d]
Average score (SD)	4.33 (.72)	4.43 (.92)	4 49 (.88)	4.22 (.99)
Percent scored at 5 or above*	16 percent	25 percent	18 percent	14 percent

[a]N = 92 classrooms. [b]N = 92 classrooms. [c]N = Scores for 100 classrooms. [d]N = 392 classrooms.

*A score of less than 3 indicates poor quality care. A score of 3 through 5 indicates mediocre quality. A score of 5 or greater indicates developmentally appropriate or good care.

The data in columns 4-5 are from *Cost, Quality and Child Outcomes in Child Care Centers: Public Report* (p. 30), by the Cost, Quality and Child Outcomes Study Team (1995). Reprinted with permission.

Appendix A: Table 2	**Adult Involvement Scale Ratings: Comparison of 1996 Sample with California and National Samples of the Cost, Quality and Child Outcomes Study**			
Interaction Scores*	1994[a]	1996[b]	CQCO Study California Preschool Sample[c]	CQCO Study National Preschool Sample[d]
	Average Score (Standard Deviation)			
Detachment	1 51(59)	1.61(.61)	1.50(.59)	1.70(.64)
Harshness	1.50(.61)	1.50(.60)	1.70(.64)	1.80(.69)
Sensitivity	2.99(.63)	3.05(.58)	2 80(.68)	2.70(.73)

[a]N = 148 classrooms. [b]N = 147 classrooms. [c]N = scores for 82 classrooms. [d]N = 511 classrooms.

*For detachment, harshness and sensitivity, a score of 1 indicates behavior was uncommon for a teacher; a score of 4 indicates behavior was characteristic of a teacher.

The data in columns 4-5 are from "Classroom process and classroom structure," by L. Phillipsen, D. Cryer, and C. Howes (1995), in *Cost, Quality and Child Outcomes in Child Care Centers: Technical Report* (p. 143), S. Helburn (Ed.) (1995). Adapted with permission.

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GLOSSARY

Accreditation is a certification given to a child care program that meets certain standards of quality set by the accrediting organization; in the case of this study, by the National Association for the Education of Young Children (NAEYC).

Analysis of Variance is an analytic technique used to compare the means of two or more groups and to determine whether they differ significantly. Analysis of variance is used, for example, to compare turnover rates among centers paying different wages.

Arnett Scale of Adult Involvement is designed to measure a teacher's interactions with children. Three subscales are derived. Sensitivity (nine items) includes the teacher's warmth, affection, attentiveness and engagement with children. Harshness (nine items) measures the critical, punitive and threatening behavior. Detachment (four items) measures low levels of interaction, supervision and interest. Mean scores for all subscales range from 1-4. High scores for sensitivity and low scores for detachment and harshness are ideal.

Assistant Teachers are persons working under the supervision of a teacher; this term also includes teacher aides.

Auspices refers to the legal status and ownership of a center; in this study, two types of center auspices–for-profit and nonprofit status–are compared.

Background is used in this study to describe the formal education and specialized training in early childhood education or child development of teaching staff and directors. In this study, "low background" teachers have 24 or fewer credits of college-level early childhood education training. "High background" teachers have completed a college degree in early childhood education or a related field.

Background Climate is a variable that refers to the percentage of teaching staff with high or low background levels that are employed in a center.

Center-based child care refers to group care outside a home environment. Child care may be operated by diverse entities including companies established to operate child care businesses, churches, single or multi-purpose nonprofit agencies, public schools, labor unions, or employers such as hospitals or government agencies including Head Start and publicly-funded Pre-Kindergarten (Pre-K) programs.

Chi-square ($\chi 2$) is an analytic technique used to indicate whether there is a significant relationship between two variables (e.g., level of education and staff position) based on their frequency.

Child Care Center, for purposes of this study, is a licensed facility in which care is provided to at least 15 young children, generally for up to 12 hours per day, five days per week, year-round.

Correlation is a statistical measure of the association between two variables. Correlation coefficients range from +1.00 (a perfect positive association; e.g., a high score on variable A corresponds to a high score on variable B) through zero (the absence of any association) to -1.00 (a perfect negative association; e.g., a high score on variable A corresponds to a low score on variable B)

Director refers to the administrative head of a child care center who has an overview of the center operation including information on center finances, staff salaries, turnover and related information. In some cases, the director may also have classroom responsibilities along with administrative tasks.

Discriminant Function Analysis is an analytic technique used to predict group membership from a set of predictors. For example, it can be used to predict whether highly-skilled teachers will stay at or leave their jobs based on their working conditions, wages, educational backgrounds or other variables.

Early Childhood Environment Rating Scale (ECERS), the most widely used global assessment of child care classroom quality, is a 37-item scale focusing on the day-to-day quality of classroom environments, activities and interactions (Harms and Clifford, 1980).

Home-based Child Care refers to child care provided by a person in her home, usually for her own and other parents' children; also known as "family child care."

Inter-rater Reliability is the degree to which two independent observers or raters provide the same results when assessing, for example, the same child or classroom with the same measure. Reliability coefficients range from 0.00 to 1.00, with 1.00 indicating perfect agreement among raters.

Licensing is the process by which a state reviews the practices of a child care program and finds that it meets state-defined standards of operation.

Logistic Regression is an analytic technique that allows one to predict a discrete outcome, such as sustained or not sustained quality, from a set of variables, such as background climate and teaching staff wages.

Mean (M) is the average score for a sample on a particular variable, which is calculated by taking the sum of all scores divided by the sample size.

Median is the score in a distribution of scores which divides the distribution in half, with 50 percent of the scores above the median and 50 percent of the scores below the median.

Multiple Regression Technique is a statistical technique that allows one to determine the predictive value of several variables on an outcome variable; for example, whether child care quality can be predicted by accreditation status, teacher background, or staff turnover.

Materials Sub-scale is a factor subscale from the Early Childhood Environment Rating Scale that captures the materials and toys in the classroom and the developmental appropriateness of the activities. This factor was developed in the *National Child Care Staffing Study* (Whitebook, et. al., 1990).

Positive Staffing is a composite variable which captures turnover and stability based on teacher background or performance. It is comprised of four categories in this study, listed from least to most desirable: highly-skilled or educated staff who left their jobs between visits; minimally-skilled or educated staff who remained; minimally-skilled or educated staff who left; and highly-skilled or educated staff who remained.

Quality is a term used to describe the type of care provided to children in child care. Child care quality can range from poor or inadequate to excellent. Sometimes the terms "quality" and "high-quality" are used interchangeably. Factors that affect quality can include, but are not limited to, the classroom environment and activities, teacher-child interactions, and the staff work environment.

Random Sampling is a strategy for selecting subjects for inclusion in a study, in such a way as to ensure that all potential subjects have an equal chance of participating. This study, for example, used random sampling to select teachers for observation, to ensure that all teachers would have the same probability of being

selected and that the sample would be representative of the teacher population in the participating centers.

Self-Study is the process by which a child care program undergoes a quality assessment in order to meet standards of accreditation set by NAEYC.

Self-Sufficiency is a composite variable for teaching staff based on the number and ages of their children, number of adults contributing to and size of their household income, and self-sufficiency wage in the county in which they live. Teaching staff are classified as self-sufficient if they meet a county-specific standard that ensures only the minimum that heads of working families need to meet their basic needs, without public subsidies or private/family assistance. Self-sufficiency standards were updated for inflation in order to compare them with family incomes for 2000.

Significance Level (p) summarizes a test performed to determine whether results (e.g., differences between two groups) are due to non-chance factors. Significance level (p) is a probability so rare that results are not due to chance. Common significance levels are .05, .01 and .0001. For example, a significant level of p=.05 indicates that results would occur five percent of the time or less by chance. Therefore, a smaller probability level (e.g., p=.01 or p=.001) indicates stronger results and less likelihood that the event occurred by chance.

Stability is used to characterize the tenure and turnover of teaching staff in a child care center. Centers with high turnover and staff who have not worked at the program for a long period have low staff stability. Centers with low turnover and staff who have worked at the program for a considerable amount of time have high staff stability.

Staff Tenure is the length of time a staff member of a child care program has worked at the particular program.

Standard Deviation (SD) is the measure of the variability of a particular variable for a given sample.

Stratified Random Sampling is a strategy in which a sampling unit (e.g., centers in the community) is divided into smaller units (e.g., centers serving different income groups), from which individual subjects are sampled on a random basis. In this example, "income" is the stratifying variable; centers were then sampled according to income groups served, in proportion to their total distribution in the community. (See also Random Sampling.)

Sustained Quality is a composite variable which captures level of center quality over time. Centers in the sample rated high in quality (overall 5 or higher on ECERS) in both 1996 and 2000 were considered for this study to have sustained high-quality care at both visits. The sustained quality variable is ordered from most to least desirable, beginning with centers which sustained their level of quality between our second and third visits, followed by those centers currently rated as high-quality, and finally by those centers not currently rated as high-quality programs.

T-test is an analytic technique for assessing whether significant differences exist between the means of two groups (e.g., quality ratings for accredited and non-accredited centers).

Teachers are persons in charge of a group or classroom of children, often with staff supervisory responsibilities. This category includes "head" or "lead" teachers.

Teacher-Directors are persons with both teaching and administrative responsibilities.

Teaching Staff includes all staff persons who provide direct care to children, including teacher-directors, teachers, assistant teachers and aides.

Tone Sub-scale, also known as Developmentally Appropriate Caregiving, is a factor Sub-scale from the Early Childhood Environment Rating Scale that captures the quality of staff-child interaction, supervision, child discipline, and other aspects of care that are a function of the nature of the caregiving provided to

children. This factor was developed in the *National Child Care Staffing Study* (Whitebook, 1990).

Turnover is the percentage of staff who cease their employment within a twelve-month or other specified period; calculated by taking the number of staff that have left and dividing it by the number of staff on the payroll.

Turnover Climate generally refers to the overall turnover rate of staff in a center; it can also be based on the percentage of teachers in each positive staffing category. Whether the director has remained at the center is also part of turnover climate.

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